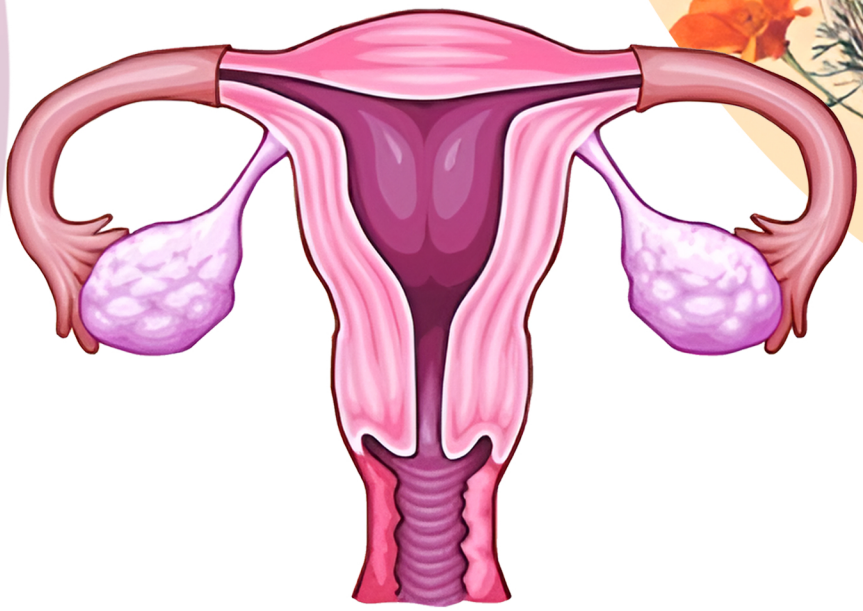

VOGS CHRONICLES

A compilation of case reports

Volume- 1, NOVEMBER 2024

Official publication of

Vijayawada Obstetrics and Gynaecological society

PRESIDENT'S MESSAGE

Dear Esteemed Colleagues,

We are pleased to present the First Volume of the VOGS CHRONICLES, a compilation of intriguing & educational case reports from our dedicated members. The cases featured in this edition are a testament to the exceptional clinical acumen & innovative problem solving skills of our members. Each case report provides valuable insights into rare unusual presentations, diagnostic challenges & unique management strategies that will improve patient care & outcome. VOGS CHRONICLES serves as a platform for our colleagues to practice the art of medical writing. It will also help our practitioners follow the best practices in feild of Womens health. I extend my heartfelt thanks to our Hon. Secretary, VOGS, Dr. Sujatha Vellanki for co initiating this project and taking it forward in leaps at a short notice and also the Chronicle committee members Dr. R. Somalatha, Dr. Ch. Suneetha & Dr. T. Jeevitha for their compiling & editing work. My gratitude to all the Contributors for their meticulous writing & sharing of their cases.

Thankyou ,

Dr. Sreedevi Vellanki,
President VOGS

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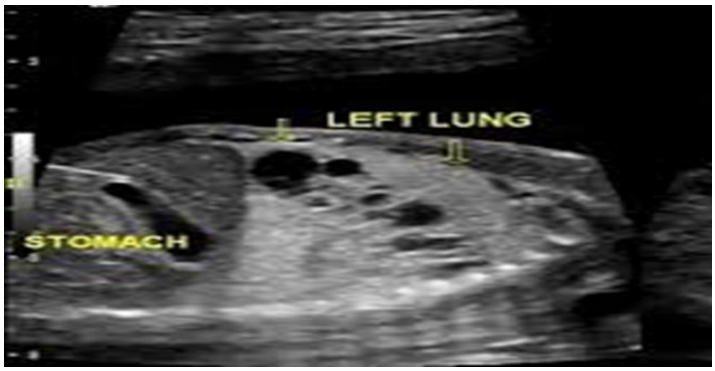
INDEX

1) A RARE CASE OF CONGENITAL AIRWAY MALFORMATION OF THE LUNG

(CPAM)

DR.K.GEETHADEVI,M.D,FICOG, AAYUSH HOSPITALS



INTRODUCTION:

Congenital air way malformation of the lung, previously known as congenital adenomatoid malformation of the lung is a rare foetal anomalythat is diagnosed by ultrasoundduring antenatal period.Prognosis depends up on size and number of lesions whether they are solid or cystic and the presence of foetal hydrops.Treatment includes-follow up, antenatal steroids to the mother and in severe cases, foetal therapy like thoracocentesis.

we present an interesting case of antenatal mother with foetal CPAM

19 years old, prime gravida married for 1 year with LMP– 24/12/2023, EDD -1/10/ 2024. C. EDD by early USG- 18/10/24,referred from another town with a TIFFA report of congenital pulmonary airway malformation in left lung for second opinion. The gestational age at the time of referral was 22-23 weeks.

All her investigations done at home town including GCTwere with in normal limits,but 1^{st}or2^{nd} trimester genetic testing was not done.

Repeat USG showed –echogenic mass 3.3 x 2.6 x 3.6 cm with multiple cysts in left lung with CPAM ratio 0.75, no fetal hydrops with moderate mediastinal shift.Fetal echo – normal, GTT at 28 weeks -88/167/140

Counselling: Patient was referred to pediatric surgeon and counselled by him.NIPTor amniocentesis – patient party was not willing due to financial constraints.Evolution of CPAM over advancing gestational age was discussed which can either progress or regress or become static.Poor prognostic signs include – enlarging mass, worsening mediastinal shift, development of hydrops. Patient party was explained the need for regular serial ultrasounds.

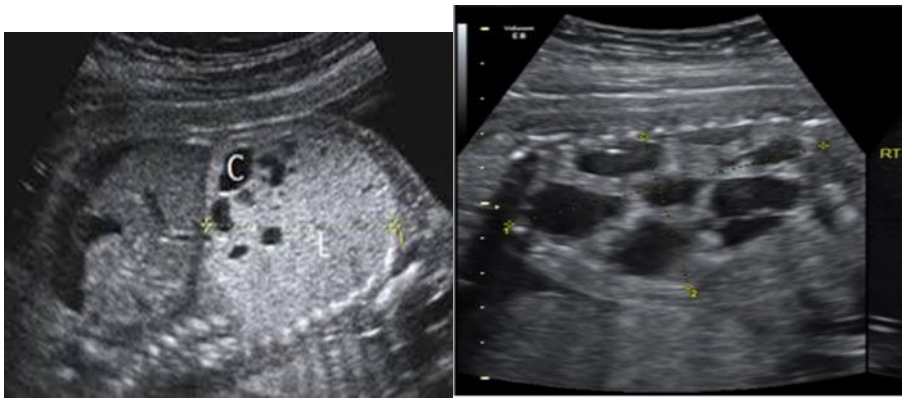
Follow up: USG was repeated every two weeks initially, later every three weeks.As gestational age advanced,the growth of the baby was with in normal limits,CPAM ratio decreased, mediastinal shift reduced and no hydrops.

At 37+ weeks,patient got admitted with spontaneous labour pains.Labour was monitored with continuous electronic foetal monitoring. Patienthad spontaneous vertex delivery with episiotomy and delivered a live male baby, weighing 3.6kg with good APGAR and oxygen saturation(spo2)was well maintained during the stay.

Before discharge, baby was sent for follow up to paediatric surgeon and he confirmed thatbaby doesn't need any intervention.

CPAM: the incidence of CPAM is 1 in 4000 births

CPAM can be of 3 types.1) Solid or microcystic2)Macro cystic 3)Mixed



The differential diagnosis for CPAM are Broncho pulmonary sequestration(BPS), bronchogenic cyst and congenital diaphragmatic hernia .In broncho pulmonary sequestration, the lung will get anomalous systemic vascular supply and isnot connected with the tracheobronchial tree.

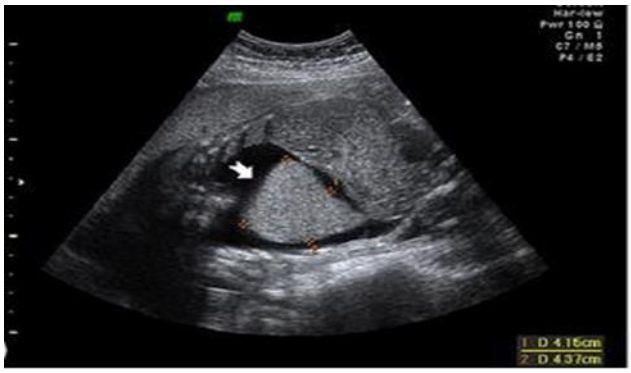


Fig.Broncho pulmonary sequestration

STOCKERS CLASSIFICATION:

- Type 0-originates from trachea and bronchi which is the severe form and incompatible with life
- Type1-originates from bronchi (70%),multiloculated, carries good prognosis, but little risk of malignancy in child hood
- Type2-15-20% arises from bronchiole, associated with other anomalies(renal, cardiac, pulmonary sequestration), but has no malignant potential
- Type3-originates from bronchiole, no malignant potential, but involves whole lobe, and solid
- Type4-originate in acini, associated with pleuropulmonary blastoma.

Prognosis:

1)CPAM volume ratio (CVR)=CPAM volume(length x breadth x width x0.52)/head circumference->1.6,

2)presence of hydrops,

3)gross mediastinal shift- indicatepoor prognosis.

CPAM is not usually associated with chromosomal abnormalities or genetic syndromes.

In 95% of the cases, lesion is unilateral, may involve one lobe or segment of lung.

Foetal hydrops is seen in 10% of cases- associated with ascites, pericardial and pleural effusions, scalpoedema and anasarca.Ifmass: thorax ratio>56%, there may be diaphragmatic eversion.Polyhydramnios is seen due to compressed and obstructed oesophagus.Defects in other systems-cardiac, renal and trachea-oesophageal fistulas are seen in 10% of cases.95% survival rate is seen if no hydrops where as poor prognosis in the presence of hydrops.

Rare chance of pleuropulmonary blastoma or malignancy is seen in childhood or in adults who had CPAM.Postnatally these babies are prone for pneumothorax, pyopneumothorax,hemopneumothorax requiring lobectomy.

Follow up during antenatal period

USG to be done every 3- 4weeks to see any mediastinal shift and if any hydrops is developing.80% of microcystic lesions resolve by early 3rd trimester, but it may not be a true resolution as USG can't detect it as rest of the lung becomes echogenic.The lesion is identified by postnatal chest x ray or CT scan.

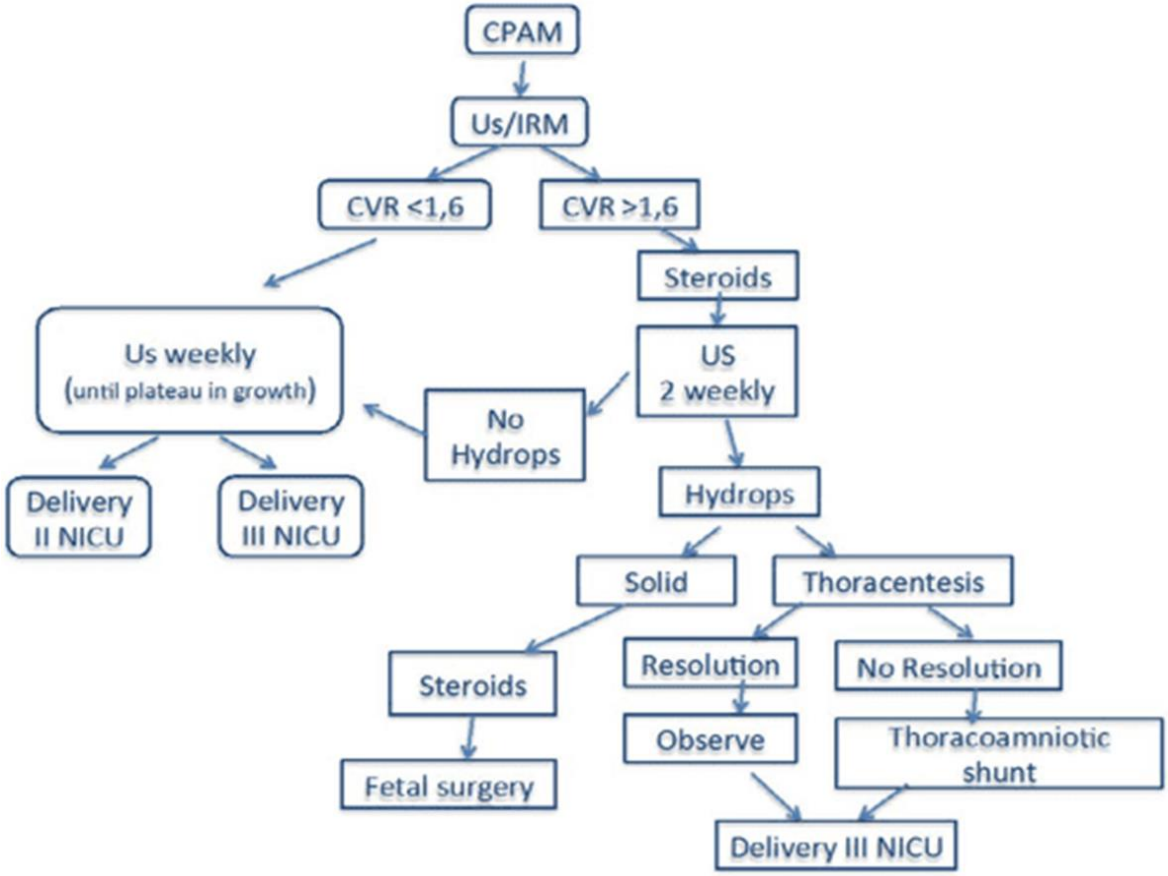
FETAL THEARPY

If cyst is large causing mediastinal shift and/or ascitesis present-thoraco-amniotic shunting can be done.Few cases of open foetal surgery in case of foetal hydrops have been reported

- Antenatal steroids to mother have shown some reduction in the size of the lesion,there by resolution of hydrops. Steroids are indicated if CVR>1.6 and usually microcystic lesions respond to steroid therapy.

Timing of delivery-deliver the babyat 38weeks,or earlier if there is FGR or hydrops. Induction of labour to aim at vaginal delivery is recommended. Delivery to be done in facilities with neonatal intensive care and paediatric surgery care in case of severe CPAM.

Management of CPAM



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1)Pooja A.Mehta,Girish Sharma:congenital pulmonary airway malformation,statpearls, national library of medicine

2)Miao Huang,Yun-Hui Gong: Treatment ofcongenital pulmonary airway malformation with rare high cystic volume ratio:A case report and literature review

3)congenital pulmonary airway malformation :the fetal medicine.org

2) ENDOMETROID OVARIAN CARCINOMA DURING PREGNANCY: A RARE PRESENTATION

Dr Nirupama.V, Senior consultant, OBGYN, Rainbow hospitals, Vijayawada

Dr Sreekanth.K, Senior consultant, Surgical Oncology, American oncology institute, Vijayawada

Abstract:

Endometroid ovarian carcinoma is rarely diagnosed during pregnancy and is generally asymptomatic1. We present a case of Endometroid ovarian carcinoma during pregnancy

Key words: Epithelial ovarian cancer, Pregnancy, Fertility sparing surgery

Introduction:

Epithelial ovarian cancer occurring during pregnancy is very rare; the incidence ranges from1/10,000 to 1/50,000 pregnancies with majority presenting in FIGO stage 12. Between 60% and 80% are asymptomatic and are identified during routine obstetrical ultrasound examination.

The Case:

A 28-year old primigravida woman with spontaneous conception presented at 29 weeks gestation with growth scan report showing a complex ovarian cyst on right side of size 15x10 cm noted to have both solid and cystic components and the same confirmed by MRI. Patient was asymptomatic and no mass had been seen at TIFFA scan. The management was discussed with patient regarding fertility sparing surgery and continuation of pregnancy till 34 weeks gestation. Ultrasound report at 34 weeks was 25x19x10 cm right complex ovarian cyst with large solid component, mild to moderate peritoneal fluid present.

At 34 weeks of gestation, elective Caesarean section and right salpingooopherectomy + omentectomy done. Operative findings- Abdomen opened by midline vertical incision, ascitic fluid sent for cytologic analysis, lower uterine segment Caesarean section done, male child of weight 2.25kg delivered with good apgar score. Huge right ovarian cyst with smooth surface, multiloculted, there is a breach of cyst wall of 2 cm at superior surface and large solid component present. Right infundibulo-pelvic ligament clamped, cut, ligated to remove the mass and right fallopian tube removed. Exploration of the whole peritoneal surface and organs done, left adnexa was normal. Infracolic omentectomy done. The final histopathology report was stage Ic grade 2 Endometroid seromucinous type ovarian carcinoma. Postoperatively the patient received chemotherapy with paclitaxel and carboplatin.

Discussion:

While ovarian cancer in pregnancy is rare, 7.2% of all ovarian cancers occur in women under 40. The majority of ovarian cancers in pregnancy are asymptomatic, with the remainder usually presenting with abdominal discomfort or nausea.

In the case we describe, a huge complex adnexal mass warrants further investigation and possible intervention. Management of ovarian cancer during pregnancy needs to balance maximizing the women's chances of survival with minimizing harm to the fetus (prematurity). Furthermore, many women of childbearing age wish to undergo fertility sparing surgery (FSS). The decision to opt for FSS in our case following the patient's preference and a review of previous publications. Satoh et al3 reported a case series of 211 patients with stage I epithelial ovarian cancer management in non-pregnant, FSS is a reasonable strategy.

In our case, the decision was made to perform caesarean section and staging laparotomy at 34 weeks of gestation and to administer chemotherapy postpartum. This was done to minimize potential toxicity and morbidity in the fetus while maximizing maternal survival.

Conclusion:

This case demonstrates a very rare presentation of Endometroid ovarian cancer in pregnancy. It highlights the importance of considering a diagnosis of Epithelial ovarian cancer in pregnant patients presenting with complex adnexal mass. Fertility sparing surgery can be considered in stage I a-c.

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1.Stephanie Gotthell, Jacob McGee et al. Endometroid ovarian carcinoma during pregnancy presenting with acute rupture. J Obstetric Gynaecol Can 2013;35(11):1020-1022.

2. Dobashi M, Ishinoshi S, Morikawa A, Takahashi K, Ueda K, Umezawa S, et al. Ovarian cancer complicated by pregnancy analysis of 10 cases. Oncol Lett 2012;3(3):577-80.

3. Satoh T, Hatae M, Watanabe Y, Yae

3) A COMPLETELY CURED CASE OF FIGO STAGE -3 CHORIO CARCINOMA

DR. K. PRABHADEVI, Former PROF& HOD.OBG. NRI.

ABSTRACT: A patient 19 years old got admitted at NRI hospital, with H/O heavy menstrual bleeding and also inter menstrual bleeding, of 18 – 20 months , has been on treatment irregularly.,else where,under went investigations, including D&C. OB – HISTORY—Married life- 2yrs. Divorced.Past h/o ? one abortion of 3/12. .Patient was subjected to thorough investigation& as patient was found to be severely anemic,blood transfusion done, posted for D&C- H/P/E revealed as Chorio carcinoma. Further work up done to know staging,aswell WHO prognostic score.Labelled asFIGO STAGE 111-PROGNOSTIC SCORE -9, there by patient was treated with multi drug chemotherapy,EMA-CO, needed 7 cycles of multi drug regimen along with number of blood transfusions,with time to time admissions .Monitoring& treatment was done, as per strict guidelines.Following full treatment, patient was advised effective contraception, for 2 years along with good timely monitoring. 2years after follow up, as there were no signs of the disease, advised to plan for pregnancy, conceived, and given birth 3 children by vaginal delivery, in a period of 8 years, underwent lap tubectomy later.both mother&children healthy.Take home message-the only cancer that is more treatable& curable by chemo therapy is GTN, if diagnosed early& treated correctly .

KEY WORDS-GTN, Chorio carcinoma, β-hCG, EMA-CO

OUTLOOK • Introduction • Case report • Discussion • Summary • Conclusion • References

INTRODUCTION -Choriocarcinoma is a fast-growing cancer, occurs from abnormal proliferation of placental trophoblast, It is the most malignant variety of Gestational trophoblastic disease in the reproductive period,.spreads by haematogenous mode. If treatment not given - very fatal.

CASE PRESENTATION- Patient,19 years, with1st admission, on– 31.01.2012 and discharged on – 02.02.2012 With complaint of excess bleeding P/V, Inter menstrual irregular bleeding of 18- 20 months. Had some treatment at Mangalagiri. M.H– 4-5/30, R.M.F, Painless, before the present complaint.

Obstetric history • M.L– 2 years.

Personal history& Family history-nil significant .

• Hb%- 10.7 g/dl, WBC – 5,000,DC – P-70%, L-28%, E-2%.ESR – 45 mm

• VDRL, HBsAg, HIV – Negative. Blood Group – 'B'+ve.Urine –Alb, Sugar, Micro – nil

Outside reports: on 29.01.2012

U/S Scan - Thickened endometrium showing echogenic lesion 2.5 x 1.5cm with in cavity ? uterine polyp.

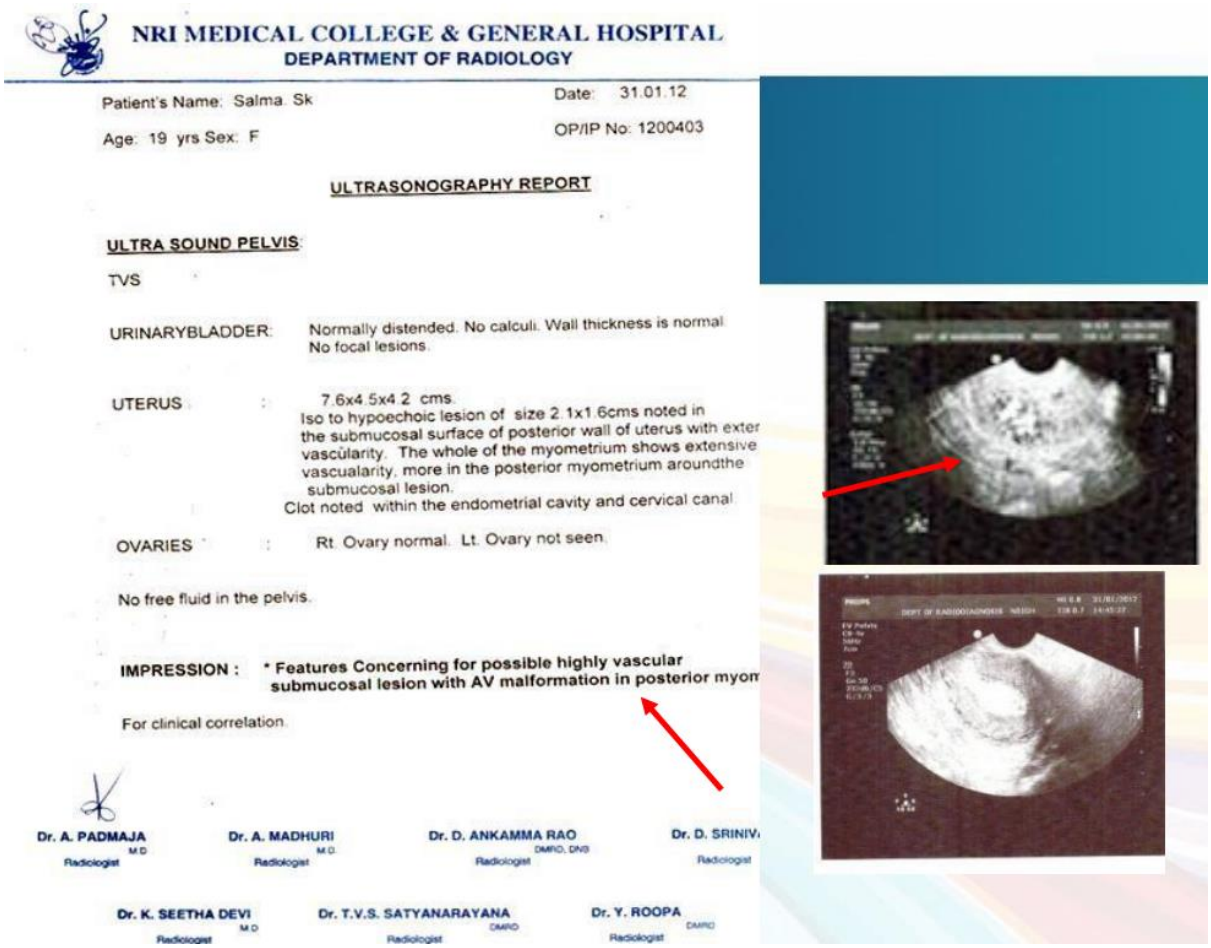
Underwent D &C long before – report not available 31.01.2012 -G.C – Grossly anaemic, P/A– soft. P/S – Cervix healthy. P/V –cervical os open. bleeding P/V+ Uterus – AV, bulky, M. FF.

Diagnosis--AUB for evaluation.

Treatment-advised Inj Tranexamic acid – 500 mg iv/bd, Blood transfusion,

Urine hCG, monitoring of vitals, watch for vaginal bleeding.

Investigations (at NRIGH) -Urine hCG +ve, Hb %- 6.5 g/dl, WBC- 11,200, DC– N-89,L-08,E-1,M-2, Platelets – 3.3 lakhs/cu mm. LFT,PT,INR–WNL, Renal profile – WNL, Thyroid profile – WNL, U/S scan - at NRI • Features of possible highly vascular submucosal lesion with AV malformation in the post myometrium. Ovaries normal.



NRI MEDICAL COLLEGE & GENERAL HOSPITAL
DEPARTMENT OF RADIOLOGY

Patient's Name: Salma Sk Date: 31.01.12
Age: 19 yrs Sex: F OP/IP No: 1200403

ULTRASONOGRAPHY REPORT

ULTRA SOUND PELVIS

TVS

URINARYBLADDER: Normally distended. No calculi. Wall thickness is normal. No focal lesions.

UTERUS : 7.6x4.5x4.2 cms. Iso to hypoechoic lesion of size 2.1x1.6cms noted in the submucosal surface of posterior wall of uterus with exter vascularity. The whole of the myometrium shows extensive vascualarity, more in the posterior myometrium aroundthe submucosal lesion. Clot noted within the endometrial cavity and cervical canal

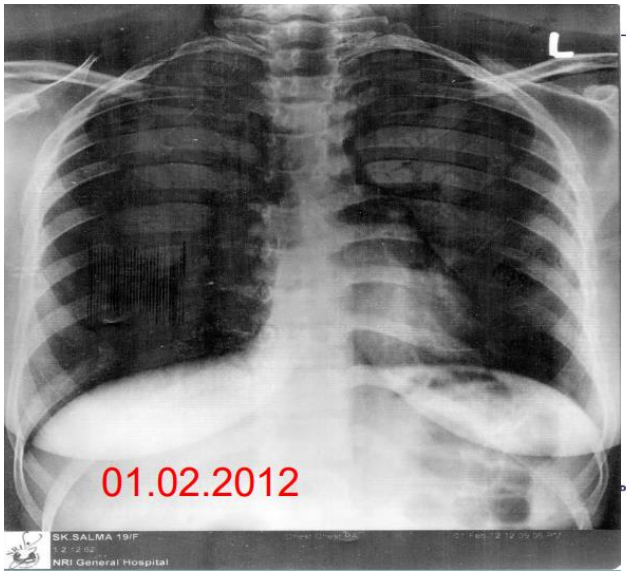
OVARIES : Rt. Ovary normal. Lt. Ovary not seen.

No free fluid in the pelvis.

IMPRESSION : * Features Concerning for possible highly vascular submucosal lesion with AV malformation in posterior myom

For clinical correlation.

Dr. A. PADMAJA M.D Radiologist
Dr. A. MADHURI M.D Radiologist
Dr. D. ANKAMMA RAO DMRD, DNB Radiologist
Dr. D. SRINIV Radiologist
Dr. K. SEETHA DEVI M.D Radiologist
Dr. T.V.S. SATYANARAYANA DMRD Radiologist
Dr. Y. ROOPA DMRD Radiologist



NKI MEDICAL COLLEGE & GENERAL HOSPITAL
DEPARTMENT OF RADIOLOGY

Patient's Name: Sk. Salma — Date: 01.02.12
Age: 19 Yrs Sex: F — OP/IP No: 192942
X – Ray No: 62

X – RAY CHEST PA VIEW

Heart	:	CT ratio with in normal limits. Cardiac contour normal.
Mediastinum	:	Normal contour.
Lungs	:	Well expanded and unremarkable.
Pleura	:	Costo phrenic angles normal.
Bony cage	:	Unremarkable.

IMPRESSION: * No obvious abnormality.

Dr. A. PADMAJA M.D. Radiologist — Dr. A. MADHURI M.D. Radiologist — Dr. D. ANKAMMA RAO DMRD, DNB Radiologist — Dr. D. SRINIVAS M.D. Radiologist
Dr. K. SEETHA DEVI M.D. Radiologist — Dr. T.V.S. SATYANARAYANA DMRD Radiologist — Dr. Y. ROOPA DMRD Radiologist

D & C done ↓ aseptic precautions –Curettings sent for HPE,

Blood Transfusion on 06.02.2012, Biopsy Report- No.259/12 as **Choriocarcinoma**.

NRI Medical College & General Hospital
Chinakakani, Mangalagiri(m.d), Guntur(d.t)

Department of Pathology
BIOPSY REPORT

BIOPSY No: 259/12 **Date: 10-2-2012**

NAME OF THE PATIENT: SK. Salma.

Sex/Age: F/19yrs. **OP/IP: 192942/2288968** **UNIT: OBG-II**

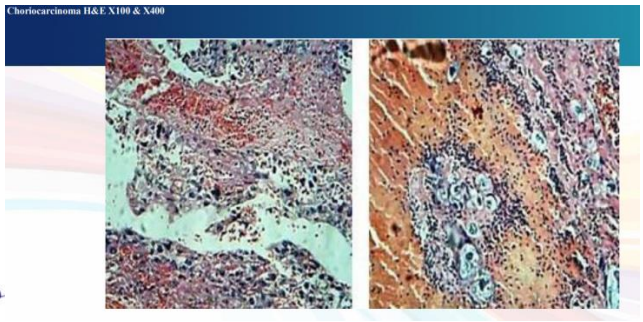
NATURE OF BIOPSY: Products of conception.

CLINICAL DIAGNOSIS: G3 A2 with incomplete abortion.

GROSS FINDINGS: Received multiple blackish tissue bits along with few grey white tissue bits altogether measuring 5x5 cm.

MICROSCOPIC EXAMINATION: Sections studied show proliferating trophoblastic tissue consisting of both cyto and syncytiotrophoblasts with bizarre looking mitotic figures, areas of haemorrhage and necrosis. No villi are seen.
The material also includes a small bit of non secretory endometrium.
Histological feature are in favor of choriocarcinoma.
Advised to correlate clinically and follow up with chest X-ray and β- hCG level estimation.

Kindly Correlate Clinically, Please Discuss for any clarifications. PROFESSOR

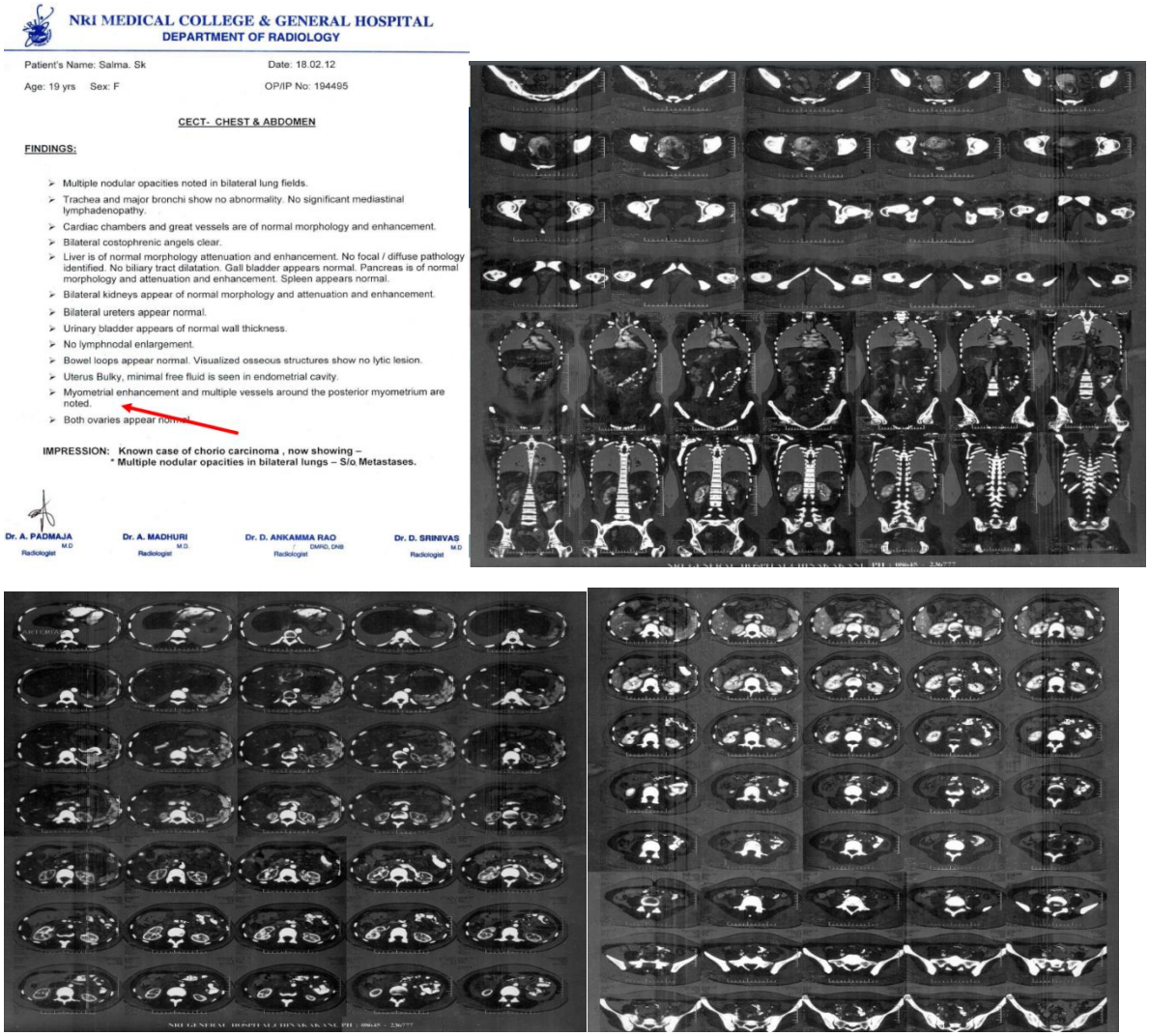


2 nd Admission

Admitted on 15.02.2012 at 12.36A.M. with a big bout of bleeding & clots and discharged – 16.02.2012 (LAMA) at 3.50 PM. G.C – conscious, Coherent, Pallor +, Temp – 98.4, P.R– 120/min, R.R-28/min, B.P-90/60 mm Hg, P/A– Soft, P/S – Cervix and vagina healthy, bleeding +,necrotic tissue +

Advised IV fluids, Blood, Inj.Tranexamic acid I.V

Investigations: Hb%- 6.3g/dl, Platelets-2.6 lakhs/cumm, BT– 2min 30 sec, CT – 4min 30 sec. 15.02.2012, 9.00AM seen by Unit Chief • With report of Choriocarcinoma. - counselled about Chemotherapy, Complications, Cost, etc.



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Patient's Name: Salma. Sk Date: 18.02.12
Age: 19 yrs Sex: F OP/IP No: 194495

CECT- CHEST & ABDOMEN

FINDINGS:

- Multiple nodular opacities noted in bilateral lung fields.
- Trachea and major bronchi show no abnormality. No significant mediastinal lymphadenopathy.
- Cardiac chambers and great vessels are of normal morphology and enhancement.
- Bilateral costophrenic angels clear.
- Liver is of normal morphology attenuation and enhancement. No focal / diffuse pathology identified. No biliary tract dilatation. Gall bladder appears normal. Pancreas is of normal morphology and attenuation and enhancement. Spleen appears normal.
- Bilateral kidneys appear of normal morphology and attenuation and enhancement.
- Bilateral ureters appear normal.
- Urinary bladder appears of normal wall thickness.
- No lymphnodal enlargement.
- Bowel loops appear normal. Visualized osseous structures show no lytic lesion.
- Uterus Bulky, minimal free fluid is seen in endometrial cavity.
- Myometrial enhancement and multiple vessels around the posterior myometrium are noted.
- Both ovaries appear normal.

IMPRESSION: Known case of chorio carcinoma , now showing –
* Multiple nodular opacities in bilateral lungs – S/o Metastases.

Dr. A. PADMAJA M.D Radiologist
Dr. A. MADHURI M.D. Radiologist
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Dr. D. SRINIVAS M.D Radiologist

FIGO staging of Gestational trophoblastic neoplasia

State I - Disease confined to the uterus

Stage II - Disease extends to the outside the uterus, but is limited to the genital structures

Stage III - Disease extends to the lungs, with or without genital tract involvement

Stage IV - All other metastatic sites

WHO RISK SCORING based on prognostic factors (as adapted by FIGO)

Risk factor	0	1	2	4
Age (years)	<40	>40	–	–
Antecedent pregnancy	Mole	Abortion	Term	–
Interval months from end of index pregnancy to diagnosis of GTN	<4	4 ≤ 7	7 ≤ 13	>13
Pre-treatment serum Bhcg (IU/L)	$<10^3$	$10^3 \leq 10^4$	$10^4 \leq 10^5$	$>10^5$
Largest tumour size, including uterus (cm)	<3	3 ≤ 5	>5	–
Site of metastases	Lung	Spleen, kidney	Gastro-intestinal	Liver, brain
Number of metastases	–	1–4	5–8	>8
Previous failed chemotherapy	–	–	Single drug	Two or more drugs

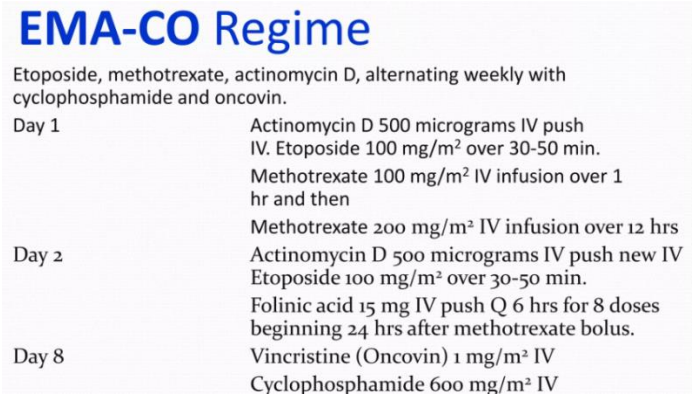
Bhcg, beta human chorionic gonadotropin; FIGO, International Federation of Gynecology and Obstetrics; GTN, Gestational Trophoblastic Neoplasia; IU, International Unit; WHO, World Health Organization.

FIGO Staging of this patient	
PROGNOSTIC INDEX	**SCORE**
Age -19	0
Antecedent pregnancy - mole	0
Interval more than 12 m	**4**
No. of metastasis	**1**
Beta HCG Titer $>10^5$ (14.0575 miu)	**4**
Primary chemotherapy - No	0
Site of metastasis - LUNG	**1**
Largest tumour	0
TOTAL SCORE	**10**

FIGO - Stage-III, Prognostic Score - 10 (High Risk GTN)

Plan of Action - Multi Drug Regimen - (EMA/CO) E-Etoposide, M-Methotrexate, A-Actinomycin, C-Cyclophosphamide, O-Oncovin(Vincristin)

Informed Consent taken



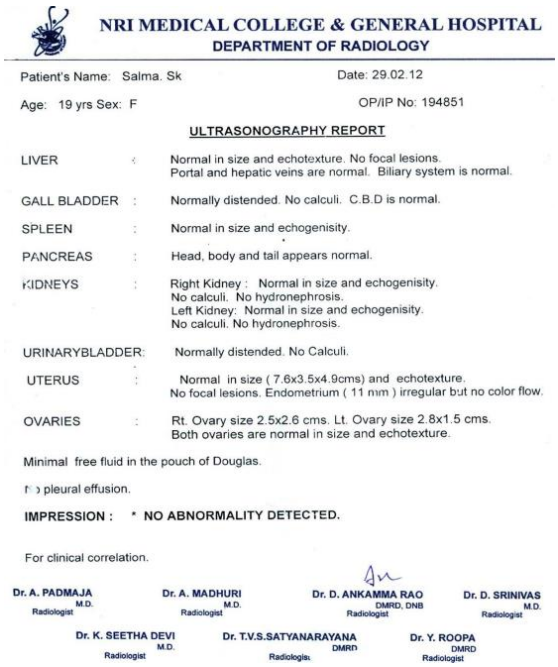
EMA-CO Regime

Etoposide, methotrexate, actinomycin D, alternating weekly with cyclophosphamide and oncovin.

Day 1	Actinomycin D 500 micrograms IV push IV. Etoposide 100 mg/m² over 30-50 min. Methotrexate 100 mg/m² IV infusion over 1 hr and then Methotrexate 200 mg/m² IV infusion over 12 hrs
Day 2	Actinomycin D 500 micrograms IV push new IV Etoposide 100 mg/m² over 30-50 min. Folinic acid 15 mg IV push Q 6 hrs for 8 doses beginning 24 hrs after methotrexate bolus.
Day 8	Vincristine (Oncovin) 1 mg/m² IV Cyclophosphamide 600 mg/m² IV

Investigations: Hb%, 5 gm, Received 2 bottles blood (4&5) • W.B.C • Platelets • PT,INR • LFT, RFT • Done before 1st course & subsequently between each course of chemotherapy.

1st Course Chemotherapy (EMACO): 19.02. 2012 (Day-1), 20.02.2012 (Day-2), 27.02.2012 (Day-8) t Course 29.02.2012 - U/S scan of pelvic organs -ET-11mm, HB -7.8 g/dl, WBC – 5,400 cells/cumm, Platelets – 2.7 lakhs/cumm, LFT & RFT- Normal.



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Patient's Name: Salma. Sk Date: 29.02.12

Age: 19 yrs Sex: F OP/IP No: 194851

ULTRASONOGRAPHY REPORT

LIVER : Normal in size and echotexture. No focal lesions. Portal and hepatic veins are normal. Biliary system is normal.

GALL BLADDER : Normally distended. No calculi. C.B.D is normal.

SPLEEN : Normal in size and echogenisity.

PANCREAS : Head, body and tail appears normal.

KIDNEYS : Right Kidney : Normal in size and echogenisity. No calculi. No hydronephrosis. Left Kidney: Normal in size and echogenisity. No calculi. No hydronephrosis.

URINARYBLADDER: Normally distended. No Calculi.

UTERUS : Normal in size (7.6x3.5x4.9cms) and echotexture. No focal lesions. Endometrium (11 mm) irregular but no color flow.

OVARIES : Rt. Ovary size 2.5x2.6 cms. Lt. Ovary size 2.8x1.5 cms. Both ovaries are normal in size and echotexture.

Minimal free fluid in the pouch of Douglas.

No pleural effusion.

IMPRESSION : * NO ABNORMALITY DETECTED.

For clinical correlation.

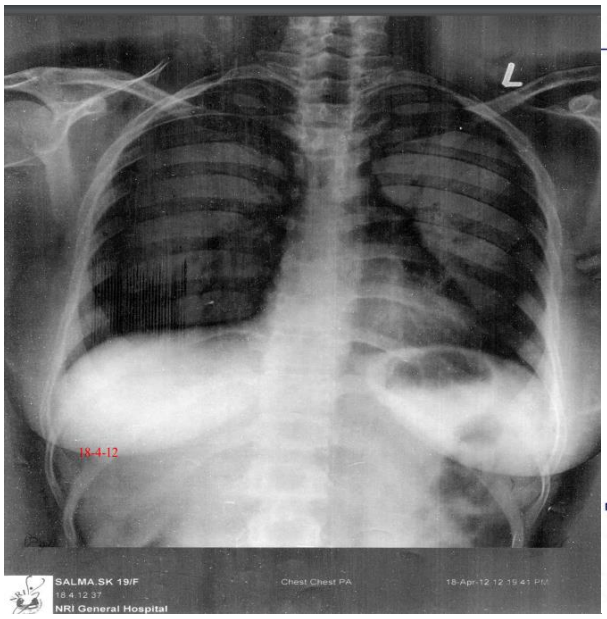
Dr. A. PADMAJA M.D. Radiologist
Dr. A. MADHURI M.D. Radiologist
Dr. D. ANKAMMA RAO DMRD, DNB Radiologist
Dr. D. SRINIVAS M.D. Radiologist
Dr. K. SEETHA DEVI M.D. Radiologist
Dr. T.V.S.SATYANARAYANA DMRD Radiologist
Dr. Y. ROOPA DMRD Radiologist

4 th Admission on 01.03.2012

02.03.2012 – Blood transfusion (6th bottle), 02.03.2012, 03.03.2012, 04.03.2012 – GC fair. 03.03.2012 – ß hCG - > 5,000 mIU/L, 05.03.2012 – Rpt. Hb% – 8.5 g/dl.

7 cycles of EMA-CO regimen given, Following 4 chemo –β-hCG- undectable, After β-Hcg,undectable—3 more courses given.

Number of CT (EMA-CO)	**DATES**	**Beta hCG(miu/ml)**	**DATES**
Before chemotherapy		1,40,575 miu/ml	18/02/12
1	19/02/12, 20/02/12, 27/02/12 (1^{st},2^{nd} &8^{th} day)	>5,000 miu/ml	03/03/12
2	05/03/12, 06/03/12, 12/03/12	921 miu/ml	17/03/12
3	20/03/12, 21/03/12, 28/03/12	88.87 miu/ml	31/03/12
4	03/04/12, 04/04/12, 10/03/12	4.6 miu/ml	14/04/12
5	16/04/12, 17/04/12, 23/04/12	2.5 miu/ml	28/04/12
6	03/05/12, 04/05/12, 10/05/12	1.38 miu/ml	17/05/12
7	18/05/12, 19/05/12, 29/05/12	<0.1 miu/ml	22/06/12



NRI MEDICAL COLLEGE & GENERAL HOSPITAL
DEPARTMENT OF RADIOLOGY

Patient's Name: Sk. Salma — Date: 18.04.12

Age: 19 Yrs Sex: F — OP/IP No: 684
X – Ray No: 37

X – RAY CHEST PA VIEW

Heart	:	CT ratio with in normal limits. Cardiac contour normal.
Mediastinum	:	Normal contour.
Lungs	:	Well expanded and unremarkable.
Pleura	:	Costo phrenic angles normal.
Bony cage	:	Unremarkable.

IMPRESSION: * No obvious abnormality.

Dr. A. PADMAJA M.D Radiologist
Dr. A. MADHURI M.D. Radiologist
Dr. D. ANKAMMA RAO DMRD, DNB Radiologist
Dr. D. SRINIVAS M.D Radiologist
Dr. K. SEETHA DEVI M.D Radiologist
Dr. T.V.S. SATYANARAYANA DMRD Radiologist
Dr. Y. ROOPA DMRD Radiologist

NRI MEDICAL COLLEGE & GENERAL HOSPITAL
DEPARTMENT OF RADIOLOGY

Patient's Name: Sk. Salma — Date: 30.5.12

Age: 19 Yrs Sex: F — OP/IP No: 12/684

ULTRASONOGRAPHY REPORT

LIVER	:	Normal in size and echogenisity. No focal lesions. Portal and hepatic veins are normal. Biliary system is normal.
GALL BLADDER	:	Normally distended. No calculi. C.B.D is normal.
SPLEEN	:	Normal in size and echogenisity.
PANCREAS	:	Head, body and tail appears normal.
KIDNEYS	:	Right Kidney: 10.5x3.5 cms. Normal echogenisity. No calculi. No hydronephrosis. Left Kidney: 10.2x3.6 cms. Normal echogenisity. No calculi. No hydronephrosis.
URINARYBLADDER:		Normally distended. No calculi.
UTERUS	:	6x2.8x3.7 cms. Normal echotexture. No focal lesions. Endometrial echo is normal.
OVARIES	:	Rt. Ovary size 2x1.6 cms. Lt. Ovary size 2.5x1.8 cms. Both ovaries are normal in size and echotexture.

Left adnexa shows 3x2 cms cyst with thick internal echoes - ? Haemorrhagic cyst.
Left tube appears to be thickened.

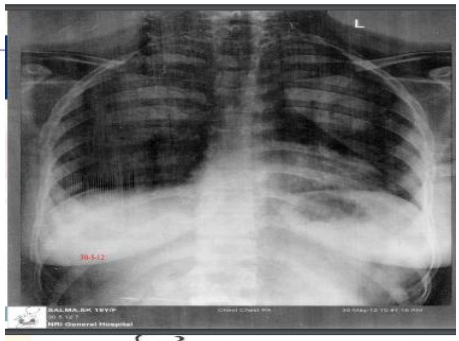
No free fluid in the abdomen and pelvis.

No pleural effusion.

IMPRESSION: * ? Haemorrhagic cyst in left adnexal region.
*** Thickened tube on left side.**

Advise follow up.
For clinical correlation.

Dr. A. PADMAJA Radiologist
Dr. A. MADHURI M.D. Radiologist
Dr. D. ANKAMMA RAO DMRD, DNB Radiologist
Dr. D. SRINIVAS M.D Radiologist
Dr. K. SEETHA DEVI M.D Radiologist
Dr. T.V.S. SATYANARAYANA DMRD Radiologist
Dr. Y. ROOPA DMRD Radiologist



NRI Medical College & General Hospital
Chinakakani, Mangalagiri Mdl, Guntur(Dt)

Patient's Name: Salma Sk. — Date: 30.05.12

Age: 19 Yrs Sex: M — OP/IP No: 684
X – Ray No: 7

X – RAY CHEST PA VIEW

Heart	:	CT ratio with in normal limits. Cardiac contour normal.
Mediastinum	:	Normal contour.
Lungs	:	Well expanded and unremarkable.
Pleura	:	Costo phrenic angles normal.
Bony cage	:	Unremarkable.

IMPRESSION: * No obvious abnormality.

Dr. A. Madhuri M.D.
Radiologist.

NRI MEDICAL COLLEGE & GENERAL HOSPITAL
DEPARTMENT OF RADIODIAGNOSIS & IMAGING

Patient's Name: Salma Date: 28.08.12
Age: 19 yrs Sex: F OP/IP No: 684

ULTRASONOGRAPHY REPORT

LIVER : Normal in size (14.5 cms) and echotexture. No focal lesions. Portal and hepatic veins are normal. Biliary system is normal.
GALL BLADDER : Normally distended. No calculi. C.B.D is normal.
SPLEEN : Normal in size (8.5 cm s) and echogenisity.
PANCREAS : Head, body and tail appears normal.
KIDNEYS : Right Kidney : 10x4 cms. Normal echogenisity. No calculi. No hydronephrosis. Left Kidney: 12x4.1 cms. Normal echogenisity. No calculi. No hydronephrosis.
URINARYBLADDER: Normally distended. No Calculi.
UTERUS : 6.2x3.7x2.6 cms. Normal echotexture. No focal lesions. Endometrial echo is normal.
OVARIES : Both ovaries are normal in size and echotexture.
No free fluid in the abdomen and pelvis.
No pleural effusion.
IMPRESSION : * NO ABNORMALITY DETECTED.
For clinical correlation.
Dr. Santhi Swarup. P

Chinakakani - Mangalagiri Mandal, Guntur District. Andhra Pradesh (India) 522 503.
Phone: 08645 - 236777 Ext: 142,177,212

Follow up

28.08.2012 - ß hCG – UNDETECTABLE

26.09.2012 – urine β-hCG – Negative

27.11.2012 - β-hCG - < 0.0 1 mIU/ml

Followed up for 2 years with ß hCG, monthly, advised O.C pills for 2years. Advised to plan for pregnancy, after 2 years follow up, Conceived - 1 st trimester scan - to exclude molar pregnancy. Following delivery, placenta - all the time was subjected for HPE.

Blessed with 3 healthy children - • Now she has been advised life long follow up with urine hCG 6 monthly.

DISCUSSION: ß hCG—is the tumour marker. If any persistent bleeding, following abortion, molar or delivery, urine hcg if +ve, gives suspicion of high risk GTN, Endometrial biopsy to be done.High risk GTN needs multi drug regime, until hCG comes negative, followed by 3 courses,

Follow up of High Risk GTN • Weekly β-hCG until normal for 3 consecutive weeks. • Monthly β-hCG for 24 consecutive months. • Contraception in follow up period.

Follow up POST MOLAR-• Serum ß-hCG-2 weekly until -ve up to 8 weeks. • Monthly until 6 months –ve after evacuation • If ß hCG doesn't become -ve by 8 weeks, ß- hCG , 2 wkly until -ve, followed by monthly once, up to 6 months after 1st -ve • Pregnancy following above.

Follow up in subsequent Pregnancies • HCG at 6 weeks and 10 weeks post partum • Placenta – to be subjected for HPE

CHORIOCARCONOMA: Incidence -1 in 1200 (Asia), Suspect – if any irregular bleeding, Choriocarcinoma – Highly malignant, 50% preceded by mole, 100% mortality if not treated, 90% cure if treated. Chemotherapy – highly successful. Prevention & early diagnosis – more important. Lifelong follow up, 6 monthly-urine hCG.

SUMMARY: A case of Choriocarcinoma- FIGO Stage – 3, diagnosed late with persistent post molar bleeding and was given 7 cycles of EMA-CO regimen and received 10 units of blood transfusion. After remission conceived & gave birth to 3 healthy children.

CONCLUSION: Outcome of GTD depends on early detection of persistent disease and by regular follow up after evacuation of Molar Pregnancy. In UK & USA– Good maintenance of registers, presence of regional and national referral, resulted in very high cure rate and eliminates fatality of GTN.

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2. Shih IM, Kumaran RJ. The pathology of intermediate trophoblastic tumours and tumour like lesions. Int J Gynecol Pathol. 2001; 20:31-47.
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ACKNOWLEDGEMENT • Department of OBGY •Colleagues •Patients •PGs & Jr Doctors.

4) SUCCESSFUL OUTCOME IN PREGNANCY WITH PORTAL HYPERTENSION, BILIARY CIRRHOSIS, ANA +^{VE}

Dr A Sasibala, Dr R Somalatha, Bhargav Nursing Home

INTRODUCTION: Pregnancy with preexisting portal hypertension poses several challenges to mother and fetus. We report a rare case of pregnancy with autoimmune hepatitis with cirrhosiswith portal hypertension and discuss important challenges in its successful management.

AIMS & OBJECTIVES:

Multidisciplinary management of patients with Cirrhosis with portal hypertension goes a long way in anticipating problems & individualizing patient care & successful outcomes.

BACKGROUND:

In Cirrhotic portal hypertension, pregnancy is very rare due to hepatocellular damage leading to amenorrhea and infertility. In patients with compensated cirrhosis, as liver function is preserved, pregnancy is possible.

Prognosis of portal hypertension during pregnancy depends upon the underlying cause and the extent of derangement of liver function. Maternal prognosis is better with compensated cirrhosis, Extra hepatic portal vein obstruction (EHPVO) and Non cirrhotic portal fibrosis (NCPF) and poor with decompensated cirrhosis of the liver. The causes of death are generally hematemesis, hepatic coma or postpartum hemorrhage. Perinatal mortality ranges mainly due to preterm delivery or IUGR.

Of the women with decompensated cirrhosis, 20 -30 % will have hematemesis during pregnancywith the mortality ranging between 50–60%.

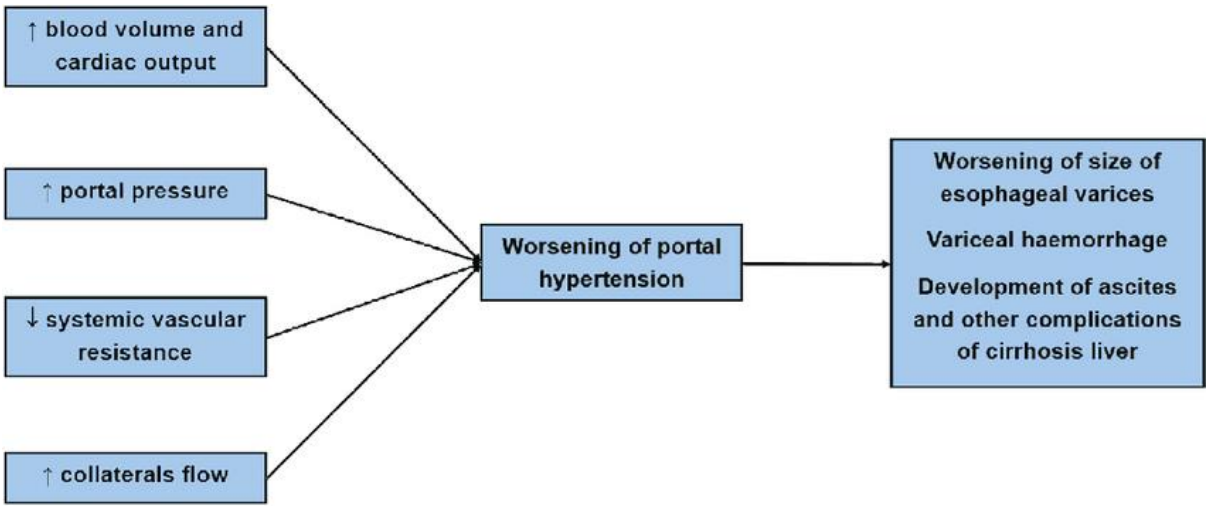
Management of portal hypertension in pregnant women is similar to that in non-pregnant pts.

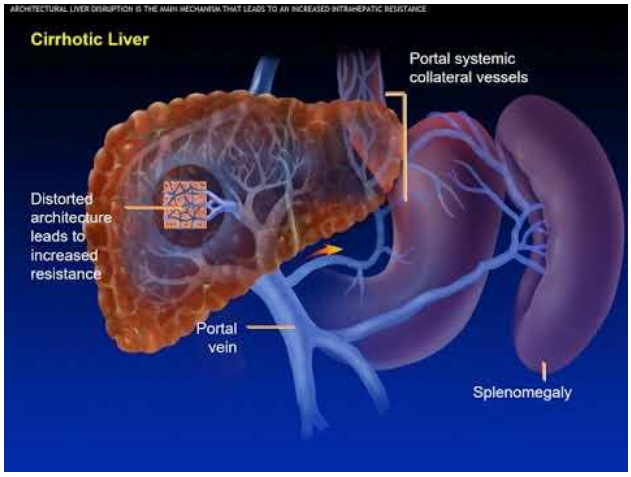
Beta blockers are given to reduce portal venous pressures.

It is possible to do shunt surgery during the second trimester.

There is a danger of variceal rupture and hematemesis when the patient strains during labor. So the 2nd stage of labor should be cut short. We must be prepared to manage PPH.

EFFECTS OF PREGNANCY HAEMODYNAMICS ON PORTAL HYPERTENSION:





CASE REPORT:

- Primi, 20yrs, booked at 8 weeks gestation. At 16yrs of age jaundice with anemia and generalized edema.
- Investigations revealed ANA +^{ve}, GrII esophageal varices, Peptic ulcer disease, cirrhosis with portal hypertension, hepatosplenomegaly and hypersplenism. Treated accordingly by gastroenterologist.
- **PRESENT PREGNANCY**- 2yrs later, spontaneous conception. Asymptomatic, no jaundice, hematemesis, malena, edema or upper abdominal pain.

- USG– Cirrhosis of liver with portal vein thrombosis, dilatation of portal collaterals with hepatosplenomegaly, massive splenomegaly with a pregnancy corresponding to 8weeks gestation. Multidisciplinary care planned in liaison with Gastroenterologist. She was given benfotiamine andursodeoxycholic acid along with folic acid, iron and calcium. Regular follow up done.
- Uneventful till 34 weeks, At 34 weeks she came with complaint of severe epigastric pain.
- O/E: Ut-34 weeks, mild tightening was present, FHR-148bpm,
- Ultrasound- Cholelithiasis & renal calculi+, AFI-7-8
- After explaining all the risks she was kept on tocolytics & steroids given for lung maturity.
- At 36 weeks she came with leaking P/V at 10am.
- At 7pm she delivered a healthy 2.75kg baby by ventouse assisted vaginal delivery because of poor maternal bearing down efforts & to cut short 2^{nd} stage of labor. She landed up in PPH & was managed. Later postpartum period was uneventful except for anemia.
- After 6 months cholecystectomy was done for acute cholecystitis.

CONCLUSION: . Recent improvements in treatment of cirrhosis have resulted in a greater number of pregnancies in these women. Termination of pregnancy needs to be considered only inpatients with decompensated cirrhosis with recurrent hematemesis and deranged liver functions. Majority of complications are preventable by Multidisciplinary management and successful outcomes are expected.

REFERENCE:

Aggarwal N et al; J Clin & Exp Hepatology; Pregnancy with Portal HypertensionS:2014 Jun; 4(2): 163–171

5) A RARE CASE OF WARM AUTO IMMUNE HEMOLYTIC ANEMIA

Dr.R.SOWJANYA M.D OBGY(Professor)

Siddhartha Medical College Vijayawada

ABSTRACT

Autoimmune hemolytic anemia (AIHA) is a rare entity during pregnancy. The fetal risk is determined primarily by the ability of autoantibodies to cross the placental barrier. Currently, the establishment of a standardized antenatal care in cases with AIHA remains as a pending issue.

KEY WORDS

Autoantibodies; autoimmune anemia; doppler ultrasound; fetal anemia; hemolytic anemia; prenatal diagnosis.

INTRODUCTION:

Warm autoimmune hemolytic anemia (wAIHA) is an autoimmune disorder characterized by the premature destruction of healthy red blood cells (hemolysis). wAIHA is the most common type of autoimmune hemolytic anemia .The disease is termed “warm” because the antibodies are active and cause hemolysis at body temperature, which is not necessarily the case in other types of autoimmune hemolytic anemia.

CASE PRESENTATION:

•28yrs MrX,G2A1 married for 4 yrs,with 8 months pregnancy ,her LMP was 21/2/2023 and EDD 28/11/2023 ,wt 55kgs, belonging to low socioecnomic status came with complaints of breathlessness on and off , increased in physical exertion(NYHA grade 2) on 28/9/2023.

•No history of chestpain, palpitations, headache, blurring, epigastric pain.

•Obstetric history: 1.Spontaneous abortion,at 2nd month 2yrs back.

Present pregnancy – conceived after ovulation induction at anu hospital .

Past history: known case of Hypothyroidism on Thyronorm 50ug since 1 yr. No h/o diabetes,bronchial ashthma, hypertension,epilepsy,heart diseses, tuberculosis.

•History of 1 blood transfusion given outside in view of anaemia

•On admission

pt was conscious and coherent, general condition pallor+,mild icterus+,

Temperature was normal,BP 110/70mm Hg,PR 86bpm,RR 18

•Investigations on 28/9/2023

•Hb 6gms%

•Platelet 1.95lakh/mm3

•Reticulocyte count 8%

•Peripheral smear showing microcytic hypochromic anemia.Normal iron profile,B12 and folic acid levels.

•On 3/10/2023 1 blood transfusion done as hb was 6gms%

•ANA profile was negative

•LDH. 462 U/L

•Viral markers negative.

Blood investigations sent to Hematologist on 06/10/2023

PERIPHERAL BLOOD SMEAR;Microcytic hypochromic anemia with anisopoikilocytosis,Neutrophilic leukocytosis,Platelets:Adequate.Reticulocytosis:11.3

POLYSPECIFIC SCREENING

Direct Antiglobulin test:Positive(4+)

Indirect Antiglobulin test:Negative

MONOSPECIFIC SCREENING

IgG:POSITIVE (4+)

IgA:NEGATIVE

IgM:NEGATIVE

ANTI C3c:POSITIVE (1+)

Anti c3d:POSITIVE (4+)

CONTROL:NEGATIVE

With all the above investigations hematologist confirmed as warm autoimmune hemolytic anemia

Hematologist advice T. PREDNISOLONE 20mg BD.

•Pt is followed with MCA PSV on alternate day and NST daily as IgG crosses placenta and causes hemolytic anemia.

Coagulation profile done which was normal

•Platelet counts were normal throughout,2 doses of betnasol coverage done on 15th and 16 th
•On 16/10/2023 MCA Doppler revealed MCA PSV 1.54mom for the period of gestation suggestive of fetal anemia.

•LSCS done on 17/10/2023 in view of unstable lie with fetal Anemia,She delivered a MCH of 2.8kgs at 1:55 pm With apgar 8/10.

Baby was under observation in NICU in view of preterm with mild anemia and small ASD.

•Hemoglobin 12gms%,DCT – negative

•Baby was discharged on 3/11/2023.

Post operatively Rpt HB 8.6 gms.

she was kept on hydrocortisone 50mcg 6th hrly for 5 days,as patient had fever post operatively. Followed by T.Prednisolone 20 mg BD for 2 wks .T.Prednisolone 20mg OD for 2

weeks.T.Prednisolone 10mg OD for 5 weeks ,T.Prednisolone 5mg OD for 2weeks.T. Prednisolone 2.5mg OD maintaining till now.

Inj low molecular heparin started and given for 5days

DISCUSSION:

WARM AIHA

Warm haemolysis refers to IgG autoantibodies, which maximally bind red blood cells at body temperature (37°C).

•wAIHA is diagnosed in patients lacking cold associated symptoms with a DAT (Coombs test)positive for IgG, IgA (rarely), or C3d ±IgG when a clinically significant cold reactive antibody has been excluded.

When such an autoantibody belongs to the IgG class, the condition is potentially dangerous to both the mother and the fetus, since IgG crosses the placenta readily.

CLINICAL PRESENTATION:

•Symptoms - fatigue, dyspnea, palpitations

•signs of anemia - pallor, icterus may be present.

DIAGNOSIS:

Low hemoglobin

•Peripheral smear - polychromatic, moderate poikilocytosis and anisocytosis

•Reticulocytosis

•Unconjugated hyperbilirubinemia

•Serum haptoglobulin – reduced

•Elevated LDH

FETAL MONITORING:

Doppler assessment of the fetal middle cerebral artery (MCA) peak systolic velocity (PSV) is the best non-invasive tool for predicting fetal anaemia in at-risk pregnancies.

•Fetal status can be observed with an NST several times a day and Dopplerometry of fetal middle cerebral artery peak systolic velocity was taken once a day.

If there is inadequate response to conservative medical treatment and there are signs of severe fetal anemia, we have to decide on termination the pregnancy.

If post partum newborn demonstrates severe haemolytic anemia - exchange transfusion might be required.

MANAGEMENT:

-Blood transfusions

-Corticosteroids

-Supportive care

ROLE BLOOD TRANSFUSION

It is reasonable to minimize use of transfusions in AIHA as transfused blood may be hemolysed.

However, for vital indications (severe anemia < 6g/ dl, cardiovascular risk factors) blood transfusions should not be withheld, and in case of hypoxemia symptoms, administered without delay.

CORTICOSTEROIDS

Corticosteroids is the usual first-line treatment for patients with warm antibody AIHA.

•In wAIHA in general, prednisolone (1mg/kg per day) is effective (~80%) and time to response is estimated at 7-25 days.

High dose intravenous methylprednisolone bolus at initiation of therapy in acute cases is suggested.

Steroid Pulse therapy –

•Dexamethasone 40 mg for 5 days or methylprednisolone 15mg/kg body weight for 3 days can be given in severe AIHA cases.

Tapering of steroids

•Reduce prednisolone to 20-30 mg over few weeks & then by 2.5-5 mg every month.

Steroid sparing immunosuppresants which can be tried in pregnancy are

•Azathioprine at the lowest effective dose is relatively safe in pregnancy – 1-2 mg/kg /day.

•Calcineurin inhibitors –cyclosporine & tacrolimus are also safe in pregnancy

•Rituximab administration during pregnancy can be considered if no other treatment options are available.

•Rituximab passes the placenta and inhibits neonatal B-lymphocyte development. However, after 6 months, B-lymphocyte levels normalized and vaccination titres after 10 months were adequate.

BRIDGING THERAPIES AND SUPPORTIVE CARE: Severe cases might rapidly deteriorate despite multiple blood transfusions, while not (yet) responding to steroids, rituximab or other therapeutic agents.

•Bridging therapies, such as intravenous immunoglobulins (IVIg) in case of wAIHA or therapeutic plasma exchange (TPE).

•Thrombosis prophylaxis is strongly advised, especially in hospitalized patients with severe anemia and LDH >1.5 times upper limit of normal.

IVIG

If patient has any contraindication to steroids or has not responded to steroids we can try IVIG

Dose – 2gm/kg over 5 days or 400mg/kg day for 5 daysResponse usually lasts for >3 weeks

•Side effects – allergic reactions, headcache, nausea.

CONCLUSION

During pregnancy, identification of the type antibodies in AIHA is crucial to estimate the potential maternal and fetal risks and to establish the follow-up. The interaction of the complement cascade with the coagulation cascade could be an explanation for a perinatal adverse outcomes.

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3.Murakhovskaya I, Anampa J, Nguyen H, Sadler V, Billett HH. Pregnancy-associated autoimmune hemolytic anemia: meta-analysis of clinical characteristics, maternal and neonatal outcomes [abstract]. Blood. 2021;138(suppl 1). Abstract 1959.

6) PRIMARY AMENORRHOEA – CASE REPORT

Dr Sreedevi Vellanki, Chief Consultant Obstetrician & Gynaecologist,

Sree Vijaya Orthopaedic & Maternity Centre, Vijayawada.

Introduction: The term amenorrhea refers to "absence of menses."

Primary amenorrhoea : No menses by age 14 in the absence of growth or development of secondary sexual characteristics. No menses by age 16 regardless of the presence of normal growth and development of secondary sexual characteristics.

Secondary amenorrhoea: In women who have menstruated previously, no menses for an interval of time equivalent to a total of at least three previous cycles or no menses over a 6-month period.

Case report: 16 yr old Miss.J.M C/O short stature, delayed puberty & not yet attained Menarche. Pain abdomen on & off since 3 months. Pain is noncyclic. Born out of nonconsanguinous marriage, by vaginal delivery. Milestones were normal. Immunised according to schedule. Hypermetropia since 2 yrs, Good intelligence. No specific illness in the past. No relevant family history. No H/O genetic abnormalities in family.

PHYSICAL EXAMINATION: HT : 132cm i.e.4ft 3.9inches, WT : 27.4kg, BMI 14, TPR, B.P normal.

INSPECTION: No pallor, **short neck, webbing of neck present, no thyromegaly, High arched palate, teeth have short crowns, fingers normal, Right foot-4th toe & little toe shorter than other toes. Nails up turned. Axillary hair absent, breast tanner stage-1. Pubic hair absent. External genitalia infantile.**

PALPATION: P/A NAD. Vaginal orifice seen. P/R : A small firm nodule palpated anteriorly ? uterus.

AUSCULTATION: Chest no murmurs heard.

Hearing normal. Olfactory sensation normal.

USG - Bilateral small renal calculi, Hypoplastic uterus and small Ovaries.

LABS: CBP normal. RFT normal. LF- SGOT, SGPT Mildly elevated. RBS normal. CUE normal. LH-43mIU/ml. FSH 148mIU/ml. E2 Low. HGH Low. TSH normal PRL normal. Lipid profile normal.

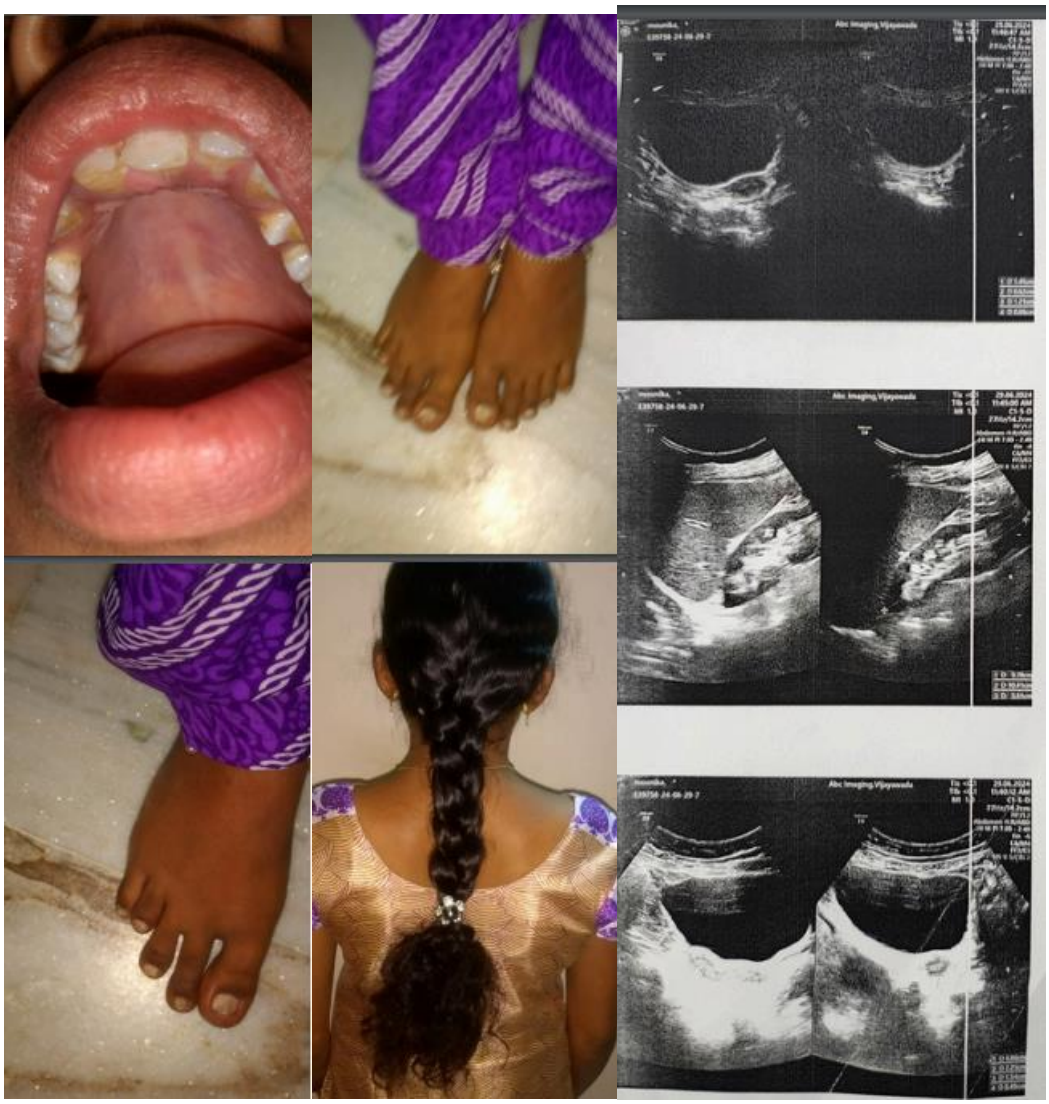
Both parents counselled. Adviced Cardiac evaluation. Need for long term hormonal medication. Remote chances of patient conceiving.

DIAGNOSIS: HYPERGONADOTROPIC HYPOGONADISM.

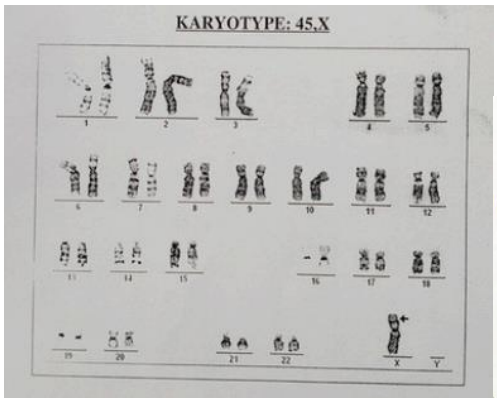
Prescription : Tab.Ethinyl estradiol 2mg/day × 30 days Tab. Medroxy progesterone 5mg/day from day 10 to 25. Tab. Calcium + Vit.d3, Had menstrual period after 3 months, changed 3 pads/day for 3 days. Mild dysmenorrhoea. With above medication she had menses.

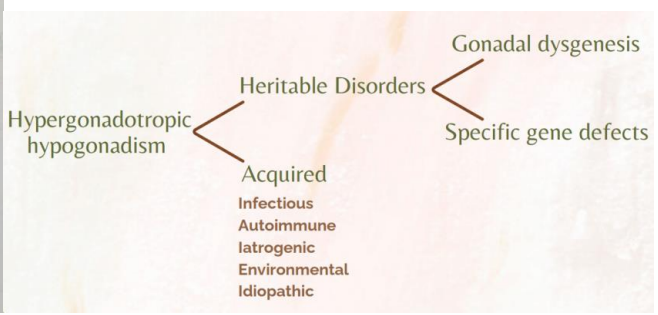
After 1year Wt: 30kg, Ht:137cm. Breast Tanner stage- II. No axillary hair. Pubic hair appeared but scanty still. Labia under developed. Cardiac evaluation done : Normal valves, good LV

systolic function, no MR, no TR, no AR. She was having withdrawal bleed with combined pills. Completed B.Tech, Working as software engineer, Planning to get married.



Discussion:





GONADAL DYSGENESIS: Normal complement of germ cells is present in the early fetal ovary. But Oocytes undergo accelerated atresia & Ovary is replaced by fibrous streak.

Two broad groups –

Normal karyotype: 46xx or 46xy Pure gonadal dysgenesis. 46xy & Gonadal dysgenesis (swyer syn) are phenotypically female because of absent T &AMH secretion by dysgenetic testis.

Abnormal karyotype : Turner syndrome (45,x) & Chromosomal mosaics like 45,x/46,xx or 45,x/46,xy. 90% never menstruate. 10% have residual follicles to experience menses & may rarely acheive pregnancy.

TURNER SYNDROME(45,x) The classical phenotype of Turner syndrome. First described in 1938 by Dr. Henry Turner. Short stature, Absent sexual development, Webbed neck, low-set ears, widely spaced nipples ("shield chest"), Short fourth metacarpals, Increased carrying angle at the elbow ("cubitus valgus"). If not recognized by phenotype or poor growth during childhood, patients with Turner syndrome generally present at or near the time of expected puberty with primary amenorrhea and absent secondary sexual development. A karyotype is definitive, and specifically indicated, in part because it may reveal a cell line containing a Y chromosome otherwise not suspected or identified (e.g.,45,X /46,XY); 5% of women with Turner syndrome have a karyotype containing all or part of a Y chromosome. It is important to identify a Y chromosome because affected individuals are at significant increased risk for developing gonadoblastoma (30%). Mosaicism in women with Turner syndrome has important clinical implications besides those relating to a cell line containing a Y chromosome. In those with a mosaic 46,XX cell line (e.g., 45,X/46,XX), the gonad may contain functional ovarian cortical tissue, resulting in some degree of sexual development, or even menses and the possibility of pregnancy. 15% of patients with Turner syndrome begin but do not complete pubertal development and 5% complete puberty and begin menstruation. Systemic manifestations resulting directly from hypogonadism like Osteoporosis, metabolic syndrome. Cardiovascular anomalies- bicuspid aortic valve, coarctation of the aorta, mitral valve prolapse, and aortic aneurysm, Spontaneous aortic dissection, which gets exaggerated if pregnancy occurs. Renal anomalies horseshoe kidney, unilateral renal agenesis or pelvic kidney, rotational abnormalities, and partial or complete duplication of the collecting system. Autoimmune disorders autoimmune thyroiditis, type I diabetes, autoimmune hepatitis, thrombocytopenia, and celiac disase, IBD. Sensorineural loss is the most common form of hearing impairment.

Individuals with TS are at risk for features of metabolic syndrome which impact cardiovascular health such as hypertension, dyslipidemia, and obesity. Thus appropriate screening, nutritional and lifestyle counselling, and medical management when indicated are key components of care of these individuals to mitigate this risk. Dental elements in patients with TS often cause defects in enamel. Reduced crown size and enamel hypoplasia. Periodic medical evaluation is indicated. Echocardiography (at diagnosis, at least once between the ages of 12 and 15 years, and every 5 years if normal; more often if abnormal) Renal ultrasonography (once if normal, every 3–5 years if abnormal) TSH and free T4 (at diagnosis and every 1–2 years) Complete blood count, fasting glucose, lipid profile, renal function tests, and liver enzymes (every 2 years) Antiendomysial antibodies, to detect celiac disease (at diagnosis) Audiometry (at diagnosis, at least once during the teen years or young adulthood, and every 10 years if normal). Natural pregnancies are described in women with Turner syndrome, but they are rare and are associated with a relatively high risk for sex chromosome aneuploidy and spontaneous abortion. Oocyte donation offers a realistic possibility of biologic

parenting. Eggs and embryos of these patients are at a higher risk for sex chromosome aneuploidy.

OBSTETRICAL AND MATERNAL COMPLICATIONS OF PREGNANCY IN TS: Practice Committee of the American Society for Reproductive Medicine concluded that TS is a relative contraindication to pregnancy, that appropriate screening must be conducted, and that an aortic size index greater than 2 cm/m2 is an absolute contraindication to pregnancy in TS. Dissections may also occur after pregnancy; thus, ongoing surveillance is recommended. Rates of pregnancy-induced hypertensive disorders, including hypertension, preeclampsia, and eclampsia, are also higher in TS. An earlier diagnosis of TS allows for earlier initiation of growth hormone therapy if indicated. Most girls with TS require exogenous estrogen therapy to induce puberty. Any pregnancy in a woman with Turner syndrome must be considered as high risk because increased cardiovascular risk related to structural cardiac anomalies pose unique and potentially life-threatening risks that must be carefully considered before attempting pregnancy. The risk of death during pregnancy is increased as much as 100-fold, primarily due to complications of aortic dissection or rupture.

CONCLUSION: Girls and women with TS will have increased medical, social and behavioural concerns. Making an earlier diagnosis of TS will allow earlier educational and cognitive behavioural and pharmacological interventions to improve medical and social behavioural outcomes in the long term. Pts are adequately counselled regarding their diagnosis, its long-term implications and treatment options.

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7) Reproductive outcomes for infertile patient with Recurrent Implantation Failure – A Case Report

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ABSTRACT

STUDY QUESTION: How should recurrent implantation failure (RIF) in patients undergoing ART be managed**?**

WHAT IS KNOWN ALREADY: RIF is a challenge in the ART clinic, with a multitude of investigations and interventions offered and applied in clinical practice, often without biological rationale or with unequivocal evidence of benefit**.**

Introduction - Implantation is the first step in human reproduction. Successful implantation depends on the crosstalk between embryo and endometrium. Recurrent implantation failure (RIF) is a clinical phenomenon characterized by a lack of implantation after the transfer of several embryos and disturbs approximately 10% couples undergoing *in vitro* fertilization and embryo transfer. RIF can be caused by immunology, thrombophilia's, endometrial receptivity, microbiome, anatomical abnormalities, male factors, and embryo aneuploidy. It is important to determine the most possible etiologies, and individualized treatment aimed at the primary cause seems to be an effective method for increasing the implantation rate. Couples with RIF require psychological support and appropriate clinical intervention. An appropriate controlled ovarian hyperstimulation (COH) protocol should be considered. The stimulation protocol and dose of gonadotrophin require reconsideration if patients have a suboptimal response. Gonadotropin-releasing hormone agonist (GnRHa) combined with human menopausal gonadotropins (HMG) appeared to widen the implantation window compared to a single HMG protocol, resulting in improved IVF-ET success. Moreover, the use of long-acting GnRHa for a few months before IVF-ET may increase the pregnancy rate in patients with endometriosis. Administration of a single dose of GnRHa in the luteal phase can improve the implantation rate in intracytoplasmic sperm injection (ICSI) cycles. This might be partially due to differences in gene expression caused by different luteal support protocols. Therefore, it is important to select a specific protocol that includes ovarian stimulation and luteal support in patients with RIF, which may be related to the success rate. Abnormally elevated estrogen levels in fresh cycles may influence endometrial morphology and receptivity. The endometrium in fresh cycles shows a premature secretory phase followed by dyssynchronous stromal and glandular differentiation in the mid-luteal phase. Therefore, the implantation rates in fresh embryo transfer were lower than in frozen-thawed cycles. Moreover, the embryo transfer stage is important for successful implantation.

Maternal-fetal immune tolerance is a necessary condition for successful implantation. Several immunological therapies have been explored to increase implantation rates. Endometrial biopsies and peripheral blood sampling for NK cell type and count or Th cell proportion offer a method to assess the maternal immune status and a rationale for immune-modulating therapies.

Case presentation

Couple came with secondary infertility with ML 8 yrs, NCM, Regular cycles, Previous 2 failed IVF, recurrent pregnancy losses, with previous history of Pulmonary TB used ATT for 6 months, Low ovarian reserve. Male factor –Diabetes mellitus, Asthenoteratozoospermia.

1st IVF – 6 oocytes retrieved, 3 Day 5 embryos –

FET -1 (Single Embryo transfer) - Miscarriage, No Cardiac activity

FET 2 (Single Embryo transfer) - Negative

FET 3 (Single Embryo transfer) - Miscarriage @ 5 weeks

2nd IVF – 5 oocytes retrieved, 2 Day 5 embryos

FET 1(Single Embryo transfer) - Negative

FET 2(Single Embryo transfer) - Miscarriage@ 6 weeks

Was advised to go for PRP ovary followed by stimulation as they were keen on self gametes, RIF protocol without Immunoryl was followed in view of previous implantation failures.

PRP ovarian instillation done on 21/12/2023 and stimulation was started in the next cycle on 22/1/2024 as scan showed AFC – 0/2 with CC 100 mg daily + Inj Recagon 150IU + Inj HMG 300 IU + Inj GH 6 U. Final Trigger was given with Inj. Tripto 0.2 IU + Inj. HCG 10,000 IU and Oocyte retrieval was done 36 hrs after trigger. 3 M2 oocutes were retrieved, 2 Gr2 and 1 Gr3 embryos were frozen on Day5. **PGTA biopsy was done for the 2 Grade 2 embryos, 1st embryo – Euploid and 2nd embryo – Aneuploid (Monosomy 10) ERA was done - 120±3hrs.**

FET cycle was started with HRT, ET was done (Single Euploid embryo with glue) at 120±3 hrs after starting Intramuscular progesterone. Inj. G-CSF, T. HCQ and T. Tacrolimus were started at ET as part of RIF protocol. βHCG was positive **– 3791mIU/ml**, Cervical encerclage was done after NT scan in view of previous miscarriages. Now the patient is 23 weeks + pregnant.

Discussion-

ERA is a transcriptomic analysis of gene expression at different stages of the endometrium that detects WOI and can facilitate “personalized” embryo transfer for every patient. Patients with RIF appeared to have a lower receptivity proportion test. In RIF patients with a “receptive endometrium” diagnosed by ERA, embryo transfer conducted at the receptivity time led to better clinical pregnancy rates. A 5-year multicentred RCT demonstrated that personalized embryo transfer after ERA diagnosis reached higher implantation and live birth rates at the first embryo transfer cycle in infertile patients. Thus, ERA is a unique procedure for endometrial evaluation that can improve endometrium-related implantation failure.

Conclusion– COS with ICSI followed by PGT-A euploid blastocysts followed by ERA based personalised ET with immunomodulators improves implantation rate, clinical pregnancy rate and live birth rate.

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8) Interesting case of impacted pessary

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Abstract: Vaginal pessaries are effective first line treatment for pelvic organ prolapse in women who are poor surgical candidates, or who decline surgical repair. Pessaries are well tolerated provided they are willing to have regular follow up without any serious complications. A72yr old postmenopausal woman presented with bleeding per vagina with pessary in vagina with partial erosion in to vaginal wall. Exclusion of invasion into bladder and bowel was confirmed. Pessary was extracted under anaesthesia. Forgotten vaginal pessary can lead to serious complications. Patient education, proper fitting and compliance in follow up is of utmost importance in preventing complications.

Key words: Prolapse, pessary, Valsalva.

Introduction: Prevalence of pelvic organ prolapse is about 40%, and this proportion is expected to increase with aging in the population (1). Vaginal pessaries are one of the effective way in treating a prolapse in women who are not fit or not willing for surgery and temporarily in antenatal women with prolapse. Pessaries are well tolerated provided they stay compliant with the follow up visits. We describe a rare case of impacted pessary with partial expulsion.

Case Details:

72 yr old P3L3 postmenopausal woman came with complaint of minimal bleeding, not foul smelling Per vagina since 10 days, not associated with weight loss or loss of appetite. No bladder and bowel disturbances. History of mass per vagina small in nature progressed to present size 2 yrs back for which she had check up done and pessary was inserted with the advice of regular follow up. She is a known case of Hypertension on regular medications No other medical issues. Bowel and bladder regular. She reached menopause at her 50^{th} year. Her last child birth was 46yrs, all were home deliveries with resumption to regular activities within 2weeks after delivery. Her vital parameters were within normal limits. No icterus or anaemia. Per abdominal examination was normal with no organomegaly. Per speculum examination couldn't be done as patient had pain. On vaginal examination, anterior aspect of the pessary was seen at introitus below the level of pubic symphysis and right limb of pessary inferior right lateral aspect of vagina was buried partially into vaginal epithelium of 3 cm and left limb of the pessary was displaced into upper left lateral aspect of the vagina with 4 cm buried into vaginal wall (Fig1).

Preoperative investigations for surgery were with in normal limits and Computerised tomography was taken to rule out migration or proximity of pessary into the bladder and rectum

Consent was taken regarding the need for cystoscopy and chances of bowel and bladder injury. Pessary removal was done under spinal anaesthesia. Cystoscopy showed slight lateral elevation of the bladder base and trigone on the left side with mucosa intact and slight prominence of detrusor muscle(Fig2). The mucosa on the inferior aspect of the right side of

pessary was excised and pessary was cut in middle with Ruskin bone cutter (Fig3) and the pessary was pulled out. Post removal cystoscopy was intact and the right wall of the vagina was sutured .

Discussion: Female pelvic organ prolapse is common aggravating condition accounting to 40% of health issues. Non-surgical and surgical treatment options do exist. Non-surgical options include pessaries which are advised to elderly women not fit or not willing for surgery and antenatal women for first three months till the gravid uterus becomes abdominal and postnatal women immediately after delivery. Type of pessary depends on the relation of prolapse with incontinence. Proper fitting of the pessary determined by the trial for its effectiveness (2). Successful fitting is defined as comfortable fit and retention of pessary with Valsalva and voiding. There are few case reports in literature about neglected pessary with migration into bladder and rectum in 2000 but rarely reported in recent time.

Prior to application patient should be emphasised the importance of care of the pessary. Skill and tips for making removal and insertion as easy as possible need to be disseminated. Good counselling to the patient and attender about the need for pessary care routine has to be emphasised. Need for regular checkup with the consulting doctor. After the initial fitting patient should be adviced for follow-up. If patient and attender are showing a slight reluctance for follow-up its better to avoid the usage as pessary is a double-edged sword if not followed up ends up with more complications.

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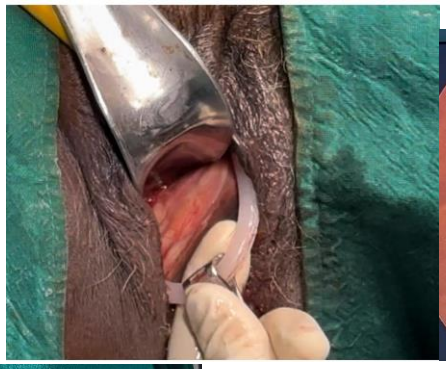
Fig 1



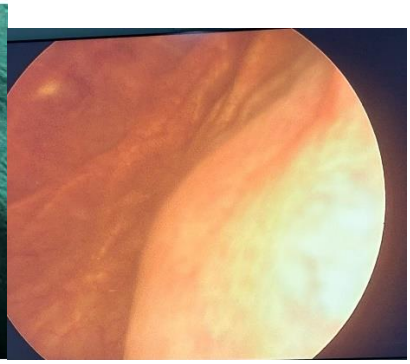


Fig 2

Fig 3

9)MIRACLE AFTER MISHAP

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-Abstract

A 25 year old successfully delivered a baby after being diagnosed as persistent GTN and receiving chemotherapy at NRIGH

-Key words: Persistent GTN, Methotrexate, Successful pregnancy.

-Introduction

Molar pregnancy is not uncommon in the Indian subcontinent with 1 in 160 pregnancies. But GTN diagnosis due diligence by the gynecologist, multidisciplinary approach with the pathologist, radiologist. Follow up being the most important with the gynecologist and if diagnosed as GTN with the medical oncologist.

Gestational trophoblastic disease (GTN) is a group of tumours that present as serious and uncommon pregnancy complications. This group includes different types of tumours developed due to the impaired proliferation of trophoblastic tissues, including epithelioid trophoblastic tumours, placental-site trophoblastic tumours, choriocarcinoma, and other tumours arising from hydatidiform moles. The diagnosis of GTN is made according to FIGO (Federation of Gynaecology and Obstetrics) criteria based on clinical and histopathologic features. Nearly half of GTN cases are detected after hydatidiform moles. In young patients who want to get pregnant in the future, hysterectomy is not preferred. Overall, fertility preservation after complicated GTN cases is rarely reported in the literature. This study presents a 26-year-old woman with successful pregnancy after a left ruptured ectopic and previous LSCS.

-Case presentation

In this case we present a 27yr old with a previous history of a cesarean section due to fetal distress 8 years before. The patient had a missed abortion in the 2rd month of pregnancy and was presented to the hospital due to massive bleeding. She underwent emergent dilatation and curettage, and the histopathological examination revealed a partial hydatiform mole. The patient was then followed up with the diagnosis of molar pregnancy. In the follow-up course, patient had persistent abdominal pain with no bleeding and was referred to NRIGH.

Her UPT was positive and scan showed no RPOC.

Serum B.HCG >1000- 2 ½ weeks following abortion. B-hcg became plateau and was labelled as low risk GTN. Thus, the patient was admitted for further diagnostic workup and chemotherapy.

B.HCG regression: 2weeks following abortion- 14/4/17- 1000 mlu/ml

24/4/17- 174.2} Methotrexate given.

2/5/17-71.46} Methotrexate given

11/5/17- 31.10} Methotrexate given

9/6/17- 4.26

12/6/17-3.04

27/6/17-6.54

27/9/17- 6.54

4/11/17- 7.23

Patient was given 2 cycles of Methotrexate in Guntur, after which she was lost to follow up, she came to American Oncology wing of NRIGH. Following this she had no conception for 1yr 3 months

Patient was followed up with urinary B.HCG during this period.

During follow up she had Urine pregnancy test positive and USG revealed a pregnancy of 6 wks. The antenatal period was uneventful and she was delivered by preterm Emergency LSCS at 36 weeks in view of fetal distress and placenta was sent for histopathology which turned out to be normal.

-Discussion

With better diagnostic methods, such as ultrasonography and sensitive β-hCG assays, it has been possible to detect HM in early pregnancy [2]. Ngan et al. (2018) reported that complications in HM occurred in 25% of patients with an enlarged uterus bigger than that during 14-16 gestational weeks [3]. After a complete mole, 18-28% of patients develop GTN. An invasive disease is several fold more common in these cases than a metastatic disease. After a partial mole, 2-4% of patients develop GTN. Almost all patients have invasive diseases in such cases, while metastatic diseases are rare [1]. In their study, Sun et al. reported that even though early diagnosis and evacuation were possible, they did not affect the appearance of post-molar GTN in the patients [4].

The progression of HM into persistent GTN can be monitored with quantitative serum β-hCG evaluation. After the surgical evacuation or hysterectomy, β-hCG is measured every week until it is undetectable or the criteria for increased or plateaued level are met. Commercially available assays can measure β-hCG to its baseline values (<5 mIU/ml).

Patients with molar pregnancy are always advised to use reliable contraception during the entire interval of hCG monitoring because a new pregnancy event during this period makes it difficult to interpret the hCG results and complicates the management process. Randomized studies performed by several groups demonstrated that moderate to low doses of oral contraceptives (OCs) do not increase the occurrence of post-molar GTN but significantly prevent pregnancies during post-molar monitoring [6,7]. Therefore, combined OC or progestin-only pills or barrier methods are advised during the monitoring phase. Pregnancy can be encouraged only after completely ruling out GTN. Patients with a prior HM have a 1-2% chance of getting a second mole in the subsequent pregnancy [8]. Therefore, all further pregnancies should be accompanied by ultrasonographic examination as early as the first trimester.

-Conclusion

After evacuation of molar pregnancy, trophoblastic tissue can persist in up to 20% of cases. Surveillance is essential after evacuation to exclude the presence of persistent diseases. The diagnosis is based on finding the stable or serially rising serum β-hCG rather than examination of tissue. Thus, patients are treated empirically with chemotherapy accordingly. Due to their rising trend of β-hCG levels, they usually get referred to medical oncology and receive chemotherapy on follow-up visits.

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10) AN ECTOPIC MASQUERADE

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ABSTRACT: Ectopic pregnancy is a life threatening situation. The classical triad of presentation involves abdominal pain, spotting/vaginal bleeding and short period of amenorrhea. Atypical manifestations and other rare symptoms pose diagnostic challenge to ectopic pregnancy. We are here presenting an interesting case of 37 yr G5P2L1D1A2 presented with complaints of severe lower abdominal pain, associated with vomitings. Her cycles were regular and her LMP was within 10 days of onset of her symptoms. She went to 3-4 private hospitals where she was planned for umbilical hernia surgery and was transfused with PRBC's in view of anemia. On USG relatively heterogenous lesion noted in POD with evidence of peripheral vascularity. Exploratory laparotomy was done and bilateral salpingectomy was done.

KEY WORDS: Ectopic pregnancy, pouch of douglas, laparotomy.

INTRODUCTION: Ectopic pregnancy is a life-threatening situation. The Incidence of ectopic pregnancy in India is 1 in 150 pregnancies. Misdiagnosis of ectopic or delayed diagnosis or if not diagnosed causes severe morbidity and mortality to the mother.

CASE PRESENTATION: A 37 year G5P2L1D1A2 [previous LSCS] with K/C/O DM, HTN, Hypothyroidism presented to Dr. Psims ER with complaints of severe lower abdominal pain associated with vomitings at 11:34PM on 10/9/24. Her cycles were regular and LMP was on 19th August. Prior to our hospital admission, she went to private hospitals, where she was given analgesics for pain relief and transfused with 2 PRBC for anaemia and was treated as acute pain abdomen as there was no amenorrhea. At the time of admission, her vitals were blood pressure 90/80mmhg, pulse rate 101bpm, temperature 98.4 Fahrenheit. Per abdomen examination revealed tenderness in the right iliac fossa. UPT was positive, serum β-hCG is 583.32 mIU/ml. On USG abdomen and pelvis: Heterogenous lesion noted in POD measuring 12.6x11.4x 9.9cms with evidence of peripheral vascularity. Case was taken up for Emergency exploratory laparotomy. Intraoperatively gross hemoperitoneum of 1000ml was noted. Ruptured ectopic was noted at the ampullary region of left fallopian tube. Bilateral salpingectomy was done. She was transfused with 3 units PRBC and 4 FFP. Post operatively patient was kept on ventilator and weaned of gradually and was discharged on POD-8. Histopathology report of the tube showed features suggestive of tubal ectopic pregnancy in the left tube.

DISCUSSION: Ectopic pregnancy in essence, is the implantation of fertilised egg outside the uterine cavity, most commonly in the fallopian tube. The estimated rate of ectopic pregnancy in general population is 1-2% and is higher among those who used assisted reproductive technologies. It usually presents with the classic triad of symptoms abdominal pain, vaginal bleeding, amenorrhea. But it may also present with atypical features. Urine pregnancy test and Transvaginal sonography will aid in the diagnosis of ectopic pregnancy. It is an obstetric

emergency which contributes to significant maternal morbidity and mortality. Timely diagnosis, appropriate management are essential to prevent adverse outcomes.

CONCLUSION: This case report has several clinical implications for healthcare providers involved in obstetric care. It emphasizes the need for comprehensive clinical evaluation in women with pelvic pain even without classical triad of symptoms. Simple UPT should be done in reproductive age group women even after tubectomy and without period of amenorrhea. Prompt diagnostic evaluation including imaging and βHCG measurement is vital in achieving timely intervention and decreasing maternal morbidity and mortality.

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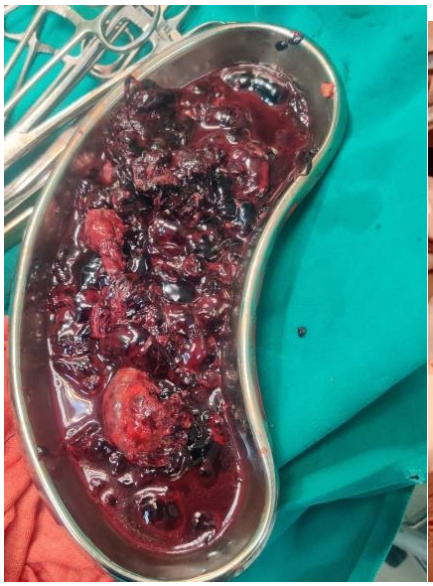

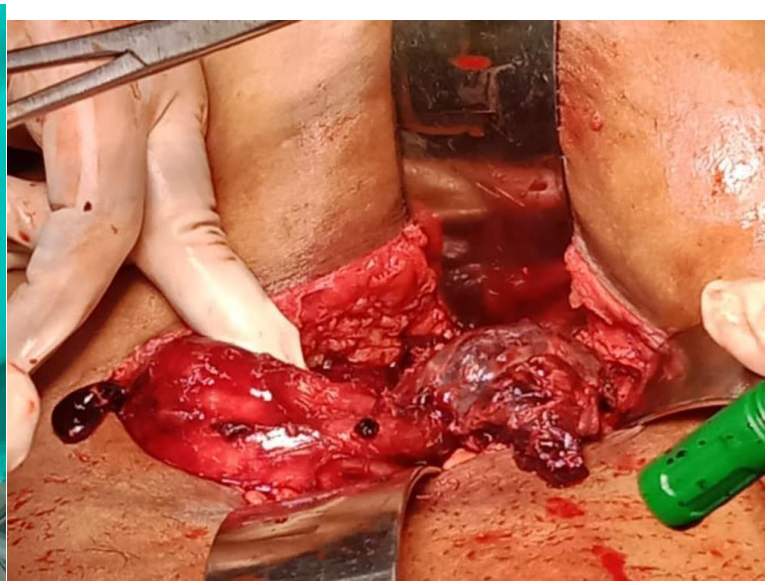

11) RH ISO IMMUNISED PREGNANCY WITH PREVIOUS H/O HDNB CASE REPORT- A RARE SIGHT IN THE RECENT TIMES

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Abstract :-Case report of Rh –ve women who has been sensitized in previous pregnancy with baby effected with severe HDNB, died on 5thPND. She came to us in present pregnancy with raised ICT titres at 9 weeks managed till 30 weeks with close followup and delivered and managed accordingly in antenatal and postnatal period with mother and baby being healthy eventually.

Key words :- RH isoimmunisation, MCA PSV, ICT, HDNB (Hemolytic Disease of Newborn)

Case presentation:- G3P2L1D1 with 9weeks gestation came to opd for routine antenatal checkup. Obstetric History:1ST - NVD – FCH –LCB 4YRS –BWT 2.8KG. LABOUR UNEVENTFUL. ANTI D NOT TAKEN. 2ND – NVD – FCH – 3KG-BABY ADMITTED IN NICU AND DIED ON 5TH DAY WITH SEVERE JAUNDICE. ANTI D NOT TAKEN.

ICT POSITIVE TITRES - 1:32 at 9 weeks of gestation Along with routine antenatal followup Fetal MCA Doppler monitoring started at 18 weeks of gestation with 2 weekly repetition till 34 weeks. Doppler at 30wks MCA PSV > 2 moms indicating fetal anemia. intrauterine transfusion was done at a neonatal hospital followed by delivery at 31 weeks. Baby birth wt:-1.6kg Hb:-7gm% bilirubin:-16. 2units neonatal packed cell transfusion given. All other preterm complications managed accordingly and baby recovered well.

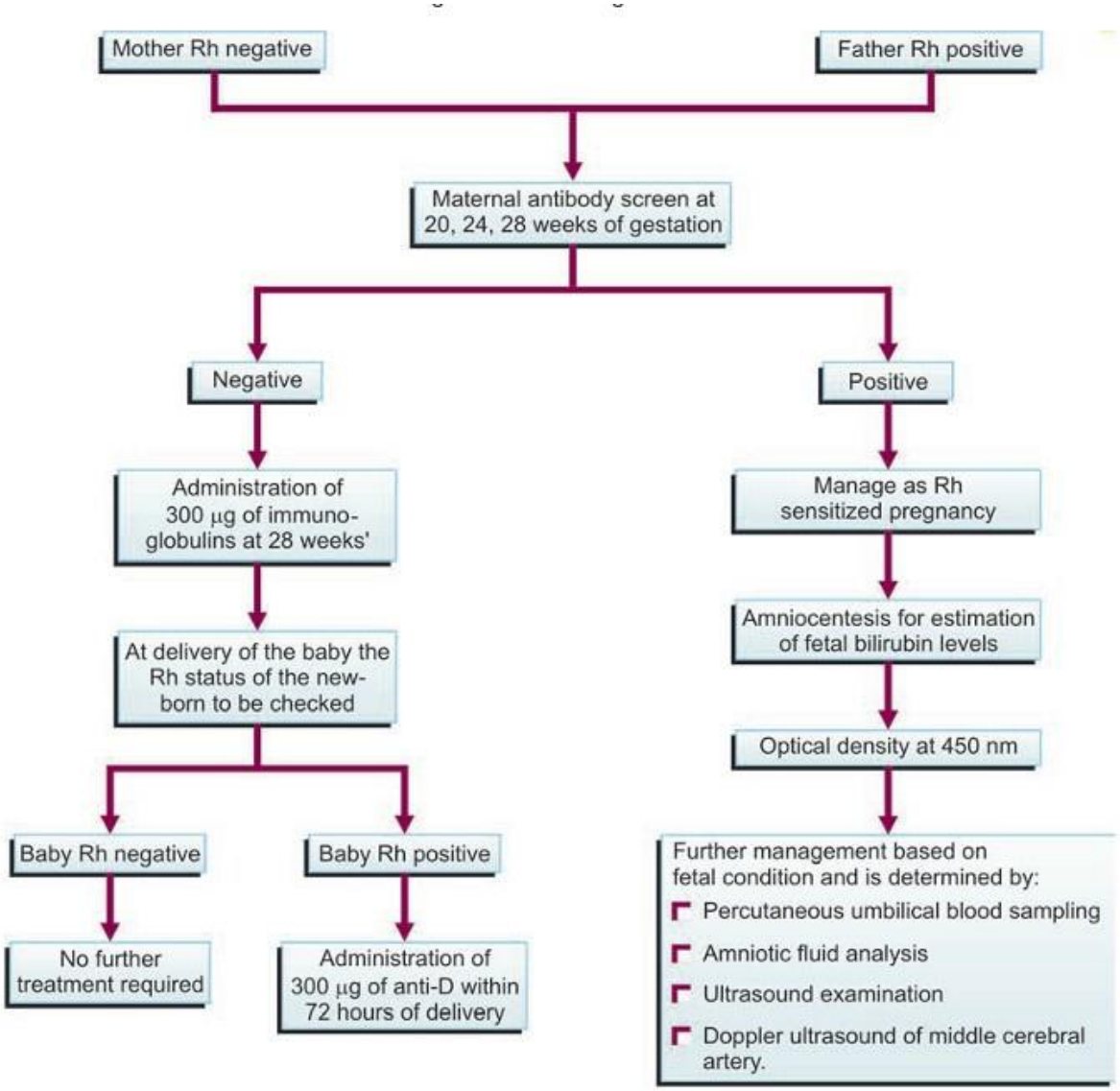
Discussion :-

History (1939): The D antigen was incidentally discovered but yet unnamed. This followed a case of haemolytic disease of the newborn observed in the infant of a 25 year old G2 P1 woman, blood group O who received O type blood

Rh Sensitisation may be determined by doing an antibody screen using indirect Coombs test. For sensitised women, management is guided by the following

- Presence or absence of history or affected foetus in previous pregnancy (e.g. with severe anaemia or hydrops)
- Maternal antibody titres (where no prior history)

Evaluation should start early – at least 4 weeks early to prior affected fetus. If anti-D titres are above the threshold for development of fetal anaemia, other tests are indicated. Initiate middle cerebral artery Doppler (MCAD) surveillance from 18 weeks. Amniocentesis may be done for amniotic fluid spectrophotometry and assay. Cordocentesis is indicated to determine fetal HCT, and Rh genotype if father is heterozygous for D. If the fetus is determined to have the D Ag, there is a risk of haemolytic disease and sequelae.



Middle Cerebral Artery Doppler (MCAD) Velocimetry –a game changer

Accurate & non-invasive screening tool for detecting moderate to severe foetal anaemia.A sensitivity of 100% and a 12% false positive rate for anaemia. **Use has resulted in up to 80%reduction in invasive testing (i.e., amniocentesis, cordocentesis)**, not useful before 18 weeks of gestation – RES too immature to haemolyse enough cells to cause significant anaemia. Not a reliable predictor of severe anaemia after 35 weeks GA. Found to be similaror betterthan amniotic fluid OD450 in prediction of anaemia

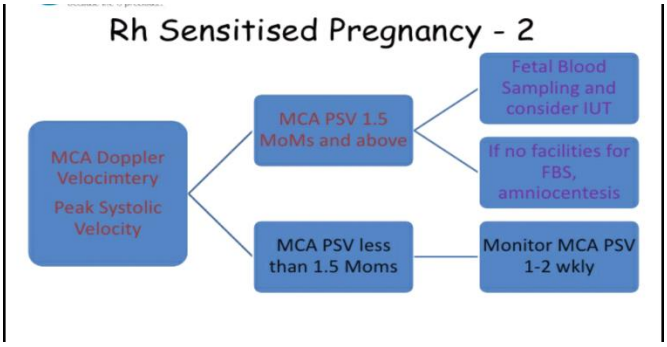
Results MCAD Velocimetry-interpretation

1. Unaffected/mildly affected foetus

Normal MCAD. Doppler is repeated 2 weekly. Deliver at or near term after lung maturity. Low risk of IUFD

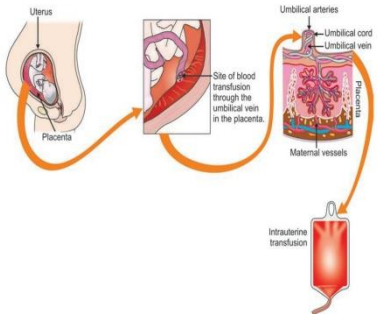
2. Severely affected

MCAD >1.55 MoM or has frank evidence of foetalhydrops. Foetus needs help to attain lung maturity before delivery. High risk of IUFD



Intrauterine Blood Transfusion

Recommended treatment for severe (haemolytic) anaemia inutero. Typically carried out between 18 and 35 weeks GA. May be given intraperitoneal or intravascular. O RhD negative packed cells with HCT of 80% is used. Amount to be transfused in mL is (GA-20) x 10 where GA> 20 weeks.



Postpartum management of the neonate

Baby, should be admitted into the neonatal intensive care unit. Regular assessment for DCT, Hb, bilirubin levels has to be done. An urgent exchange blood transfusion is indicated in moderate to severely affected neonates. Phototherapy for mild cases. Some infants may develop late anemia (hyporegenerative anemia)

Special feto-maternal hemorrhage risk states

In delivery the normal amount of foetal blood that enters the maternal circulation is <0.5 mL. Dose of Rh IgG given @ 300 mcg will neutralize nearly 30 mL whole foetal blood (or 15 mL Rh+ foetal RBCs).

Abortion: Up to 5% chance of sensitisation.

Invasive foetal procedure: Up to 11% of sensitisation. A dose of 300 mcg is recommended.

Antepartum haemorrhage: 300 mcg stat, to be repeated 12 weeks later if pregnancy lasts that long.

External cephalic version: Up to 6% chance of sensitisation. Dose is 300 mcg. Delivery with foeto-maternal haemorrhage.

Recent advances:-

Non-invasive foetal RhD genotyping (from foetal cell-free DNA in maternal circulation)

A lower 50 mcg dose preparation of Rh IgG for use following first trimester abortions

Concept of partial D and weak D antigens (usually test positive, but can also form anti-Rh antibodies)

Points to ponder:-

- Rhesus alloimmunisation is a real problem with 100% solution with high cost of the immunoglobulin is of concern in developing nations
- Lack of resources to adequately investigate and monitor foetus inutero
- Poor documentation of prior sensitising events
- Although its incidence has decreased dramatically, yet the consequences of haemolytic disease of the newborn remain

Conclusion :-

Every woman of childbearing age should have her ABO and Rh types done at first contact. Obtain the ABO/Rh types for husbands of women found to be Rh-negative. Ensure ICT is done at booking and 28 weeks of pregnancy with appropriate prophylaxis. A single postpartum dose may be inadequate in cases of severe foeto-maternal haemorrhage. MCA Doppler is the most sensitive test to followup the fetus in rhisoimmunisation.

12) CASE REPORT ON INTRA-OVARIAN PLATELET RICH PLASMA INJECTION AND ITS IVF OUTCOME IN YOUNG PATIENTS WITH POR WITH PREVIOUS IVF FAILURE

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Abstract

STUDY QUESTION: Does intraovarian platelet-rich plasma (PRP) injection increase the number of mature oocytes obtained after controlled ovarian stimulation (COS) in young women with poor ovarian response (POR) undergoing IVF?

SUMMARY ANSWER: Intraovarian PRP injection procedure does improve mature oocyte yield, euploid blastocyst and pregnancy rate and live birth rate after COS in young women with an established IVF history of POR.

What is known already: POR is frequently encountered among the infertile population and the number of women seeking infertility treatment related to POR is increasing. Effective treatment options for this patient population to conceive with autologous oocytes are lacking. Case series and cohort studies suggest that intraovarian PRP injection may improve follicular recruitment in women with premature ovarian insufficiency (POI) and POR.

Results-Intra-ovarian PRP injection to ovary does improve mature oocyte yield, euploid blastocyst and pregnancy rate and live birth rate after COS in young women with an established IVF history of POR. Also PRP to endometrium also increases the endometrial thickness.

Keywords-platelet-rich plasma / poor ovarian response /in vitro activation/autologous stem cell ovarian transplantation/ autologous platelet-rich plasma (PRP)/ premature ovarian insufficiency (POI)

Introduction: In women undergoing infertility treatment with IVF, a key determinant of cumulative pregnancy rate is the number of available euploid blastocysts. The number of euploid blastocysts generated is, in turn, directly associated with the number of oocytes that are obtained from the patient. Patients who produce a low number of oocytes in response to ovarian stimulation are classified under a number of diagnostic terms, including diminished ovarian reserve (DOR) and poor ovarian response (POR)

Among the treatment strategies for the treatment of POR, intraovarian injection of autologous PRP recently gained interest due to its ease of use and encouraging results. PRP is obtained by centrifugation of peripheral blood and contains more than 800 biologically active substances including cytokines and growth factors (Dhurat and Sukesh, 2014; Mariani and Pulsatelli, 2020). Due to its potential ability to induce cell proliferation and tissue healing, PRP has been used as a therapeutic option in a number of medical fields, including orthopedics, plastic surgery, dermatology, and reproductive medicine. In the context of reproductive medicine, PRP has been utilized as a treatment for endometrial hypoproliferation and to induce follicular recruitment to improve pregnancy outcomes in patients with POR undergoing IVF (reviewed in n Reig et al., 2021; Herlihy and Seli, 2022; Cakirogly et al., 2023).

Case presentation

A couple, female 30 yrs and male 34 yrs, walks into our centre with primary infertility, ML-5yrs, NCM, regular cycles with hypothyroidism, low ovarian reserve (AMH-0.9), failed 4 IUI & 4 IVF and male with Normozoospermia.,

OI+IUI x 4 cycles – Negative,

1st IVF - 7 retrieved - 1 MII - D3 Arrest,

2nd IVF - 8 retrieved - 6 MII - 2 D6 blasts PGTA – Monosomy, Discarded

3rd IVF - 6 retrieved-3 MII -2 D3 embryos transferred- failed

Laparoscopy @ Oct. 2022 - Stage 2 - endometriosis, Uterine septum - Metroplasty done Hysteroscopy - Uterus - normal - Small septum at fundus of uterus, BCL6 positive in biopsy

4th IVF - 5 retrieved - 2 D6 blasts tranfered - bhcg -negative @ May 2023,husband: No habits, SA: Normospermia, DFI: 8%

She was advised for PRP to ovary under guidance of USG and was done(11/9/24) under sedation at AFC 5/4 and pretreatment of GH and testogel was given and started her with IVF stimulation

1st (5th)IVF stimulation @OASIS in October 2023 with antagonist flexible protocol with pergoveris 300 and GH,9 days stimulation,E2-19278,OPU with PRP to ovary done- 1M2-day 5arrest.

Double stimulation with ICSI-frozen microfluidics done in oct 2023,with r-FSH and HMG with GH-12 days stim-7 retrieved-5M2- 2 grade2 and 1 grade 3 embryos- all 3 PGT-A –all 3 euploid

2nd IVF stimulation with low dose hcg protocol done-10 days stimulation-7 oocytes retrieved-5M2-2 day 5 blasts(1 grade 2 and 1 grade 3 embryo)

ERA based FET -1 FET cycle was cancelled i/v/o thin endometrium, Endometrial thickness of 6.5 mm with PRP endometrial flush twice.

ERA –receptive at 120+/_3 hrs

ERA based FET done with PRP flush to endometrium and X grast flush and RIF protocol followed and non –PGS embryo transferred with ET at 7 mm at transfer on 16/3/24

Beta hcg positive -838.35(30/3/24) and 2484(1/4/24) and she is now with 35 week

Discussion- A recent study showed Platelet-rich plasma (PRP) treatment of the ovaries significantly improves fertility parameters and reproductive outcomes in diminished ovarian reserve patients: a systematic review and meta-analysis by Éliás, M., Kónya et al in journal of ovarian research in May 2024 showed similar results.

Another RCT by Barrenetxea G et al inferred that Intraovarian platelet-rich plasma injection and IVF outcomes in patients with poor ovarian response: a double-blind randomized controlled trial had increased number of yield of mature oocytes after to PRP ovary which was published in april 2024.

Conclusion-Intra-ovarian PRP injection to ovary does improve mature oocyte yield, euploid blastocyst and pregnancy rate and live birth rate after COS in young women with an established IVF history of POR. Also PRP to endometrium also increases the endometrial thickness.

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13) FIBROID GONE WILD: A NARROW ESCAPE!!

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ABSTRACT:

Cervical fibroids, though rare, can lead to significant gynecological morbidity due to symptoms such as heavy vaginal bleeding, pelvic pain, and pressure effects on adjacent organs. Here, we present a case of a 33-year-old woman with recurrent heavy vaginal bleeding, refractory to conservative medical management, ultimately attributed to a large cervical fibroid. Initial intervention with uterine artery embolization (UAE) was employed to control acute bleeding and reduce vascularity of the fibroid. UAE led to substantial reduction in bleeding, allowing stabilization of the patient's hemoglobin levels and symptom control. Following UAE, a planned vaginal hysterectomy was performed to definitively address the fibroid and prevent further recurrence. Histopathological examination confirmed the diagnosis of a benign cervical leiomyoma. This case highlights the utility of a combined approach, employing UAE as an effective bridging therapy to control acute symptoms and minimize intraoperative blood loss, followed by definitive surgical management through vaginal hysterectomy. The patient's postoperative course was uneventful, with successful resolution of symptoms.

KEY WORDS:

Cervical fibroid, uterine artery embolization, leiomyoma, hysterectomy

INTRODUCTION:

Leiomyomas are the commonest benign neoplasms arising from the uterus and cervical fibroids accounts for 1-4% of all the leiomyomas. A cervical fibroid causes symptoms like menstrual abnormalities, dyspareunia, urinary retention, increased frequency, constipation and sometimes post coital bleeding, but acute severe abnormal uterine bleeding is uncommon.

CASE PRESENTATION:

A 33-year-old woman with a history of type 2 diabetes, heart disease (past MI, complete heart block), and splenectomy presented with severe anemia and heavy vaginal bleeding due to a large cervical fibroid. After experiencing significant hemorrhage, she was initially treated with transfusions and medications at a local hospital, but due to her deteriorating condition, she was referred to a higher center.

Upon admission, her hemoglobin was critically low (2 g/dl), requiring multiple transfusions (PRBC, FFP). She continued to bleed heavily, necessitating ICU care and bilateral UAE, which successfully controlled the bleeding. During her ICU stay, she developed pleural effusion due to a Pseudomonas infection, which was treated with antibiotics.

After stabilization, she underwent a non-descent vaginal hysterectomy with bilateral salpingectomy. The post-operative period was uneventful, and she was discharged with improved vitals. Histopathology confirmed a benign cervical leiomyoma with no malignancy.

DISCUSSION:

- Abnormal uterine bleeding (AUB) due to large cervical fibroids is a complex condition that requires individualized management, especially in patients with severe symptoms and coexisting medical issues.
- **Pathophysiology**: Large cervical fibroids, which are less common than other fibroids, can cause severe bleeding due to their proximity to the cervical blood vessels and the potential for vascular distortion. Fibroids can lead to both structural changes that increase bleeding and functional changes in the endometrium, contributing to heavy menstrual bleeding (HMB) or post-menopausal bleeding.
- **Diagnosis and Imaging**: Ultrasound and MRI are primary imaging modalities for identifying fibroid characteristics, such as location, size, and vascularity. Advanced imaging can help determine whether the fibroid might respond to conservative treatments or if surgical intervention is necessary.

Uterine Artery Embolization (UAE):

- **Indications and Mechanism**: UAE is a minimally invasive option for patients with AUB due to fibroids, especially for those at high surgical risk. UAE works by blocking blood flow to the fibroid, leading to ischemia and gradual shrinkage. This approach can reduce bleeding and bulk symptoms without the need for immediate hysterectomy.
- **Effectiveness and Outcomes**: Studies have shown that UAE can be an effective alternative to hysterectomy, with reported success rates for reducing bleeding and pain. In one study, over 85% of patients reported significant symptom relief post-UAE. However, the success may vary based on the size and vascularity of the fibroid, with larger fibroids or those with high blood supply potentially needing additional interventions.
- **Complications and Risks**: Common complications include post-embolization syndrome and rarely, infection or premature menopause. Long-term data indicate that UAE may have a lower risk profile compared to hysterectomy but may require repeat procedures in some cases.

Hysterectomy as a Definitive Treatment:

- **Indications**: Hysterectomy remains the definitive treatment for AUB associated with fibroids, particularly in cases where:
    - There is failed medical management or contraindications to other interventions.
    - The patient has severe symptoms that interfere with quality of life.
    - UAE has not controlled bleeding, or fibroid size necessitates surgical intervention.
- **Types of Hysterectomy**: Depending on the size, location of the fibroid, and patient anatomy, different approaches may be used:

    - **Non-descent vaginal hysterectomy (NDVH)** is preferred for accessibility and faster recovery, especially for large cervical fibroids.
    - **Abdominal hysterectomy** may be necessary for very large fibroids or if extensive adhesions are present.
- **Outcomes**: Hysterectomy offers permanent resolution of symptoms. Studies suggest high patient satisfaction with significant improvements in bleeding and quality of life.

Comparing UAE and Hysterectomy:

- UAE and hysterectomy each have unique roles in managing large fibroids:
    - **UAE** is often preferred in patients who are poor surgical candidates, want to preserve the uterus, or prefer a minimally invasive option.
    - **Hysterectomy** provides a definitive solution but involves more risks, especially in complex cases with significant comorbidities.
- Patient counseling is essential in choosing the approach based on individual risks, preferences, and the likelihood of symptom resolution.

Further Management Post-UAE or Hysterectomy:

- **Follow-Up**: Post-UAE, patients need follow-up to monitor for fibroid regression and symptom improvement, with MRI or ultrasound to assess the size and vascular status of the fibroid.
- **Infection Control**: Infection risk is heightened after both UAE and hysterectomy, particularly in immunocompromised patients or those with a history of recent surgical interventions (e.g., pacemaker insertion). Antibiotic prophylaxis and monitoring for signs of infection are crucial.
- **Chronic Disease Management**: Patients with coexisting conditions such as diabetes or cardiovascular disease require close management to prevent postoperative complications. Collaboration with internal medicine and cardiology may be necessary, as in the case of optimizing blood pressure, blood glucose, and cardiovascular health.
- **Hormonal and Menopausal Management**: For younger patients, UAE may preserve ovarian function, while hysterectomy may induce early menopause if the ovaries are removed. Hormonal therapy may be needed in postmenopausal patients to prevent symptoms like hot flashes or osteoporosis.

CONCLUSION:

This case of a 33-year-old woman with severe anemia and abnormal uterine bleeding due to a large cervical fibroid demonstrates the importance of a multi-disciplinary, stepwise approach. Initial stabilization with blood transfusions was followed by uterine artery embolization to control bleeding, given her high surgical risk. Once stabilized, she underwent a successful non-descent vaginal hysterectomy, effectively treating her symptoms. Postoperative recovery was uneventful, and histology confirmed a benign fibroid. This case highlights UAE's utility in acute bleeding management and underscores hysterectomy as a definitive solution, showcasing best practices for complex gynecological care in high-risk patients.

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14) STEPPING IN AT APPROPRIATE JUNCTURE

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ABSTRACT: Postpartum hemorrhage is a nightmare in obstetrics. 4 T's [Atonicity, Trauma, Retained Tissue, Blood coagulopathy (thrombin)] are the causes of PPH.

KEY WORDS: PPH, vaginal bleeding, pseudoanuerysm.

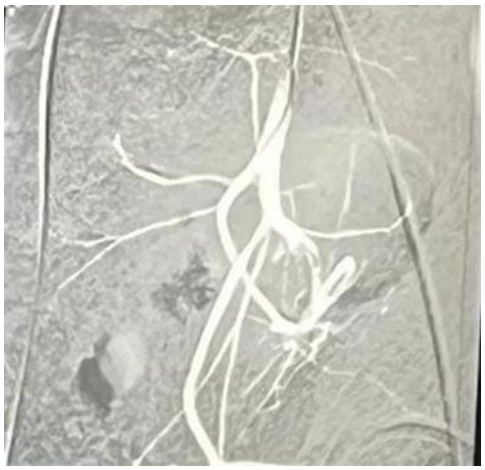
INTRODUCTION: Post partum hemorrhage is defined as blood loss accompanied by signs and symptoms of hypovolemia.

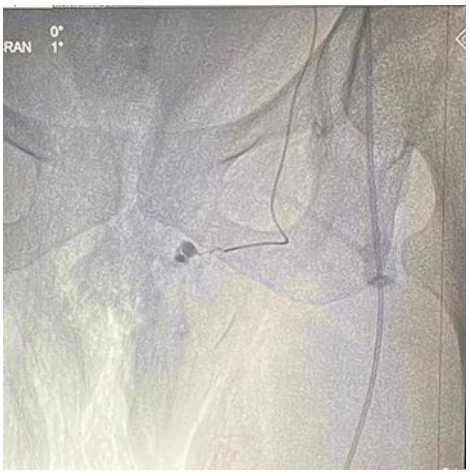
CASE PRESENTATION: Elderly primigravida with 38wks POG with K/C/O cerebellar ataxia had precipitate labour and delivered an alive boy child of birth weight 3kg at 6:50AM on 18/4/24. Following which she had Atonic PPH, managed medically but bleeding not subsided. Cervical and vaginal exploration was done, a 3x2cm cervical tear and lateral vaginal wall tear of approximately 4x3cms were identified and sutured. Vaginal pack kept insitu. After 2 hours, soakage of pad noted, hence exploration was done under anaesthesia, posterior vaginal wall hematoma of size 5x4cms noted, evacuated and sutured and as the patient continued to bleed, patient was stabilized and planned for interventional procedure which showed a pseudoaneurysm in left internal pudendal artery and chemo embolization was done by interventional radiologist. Patient had massive blood and blood products transfusion. Patient recovered and discharged on POD-9.

DISCUSSION: Post partum hemorrhage poses a significant risk to maternal morbidity and mortality. Primary causes of PPH are atonicity, trauma, retained tissue and coagulation abnormalities. PPH occurs in 1% to 3% of all deliveries and is the leading cause of mortality and morbidity worldwide. Traumatic PPH accounts for 15-20% of the cases. Incidence of postpartum hysterectomy is 0.3 per 1000 deliveries. PPH though a common scenario can be due to uncommon reasons like pseudoaneurysm, aneurysms. In cases of pseudoaneurysm, resulting from vaginal & perineal trauma incurred during spontaneous or assisted vaginal delivery, selective arterial embolisation is the preferred approach. Timely intervention can improve the overall well being of the mother. Interventional radiology has proven to be valuable, minimally invasive and safe alternative treatment to control life threatening uterine haemorrhage. Pelvic artery embolization is a successful alternative to major surgeries in controlling PPH in hemodynamically stable patients. Gelatin sponge is the most common embolic material used in the treatment of PPH.

CONCLUSION: PPH is a prevalent and frequent cause of obstetric mortality and morbidity. Pseudoaneurysm and aneurysms of pelvic arteries, though rare, should be kept in mind in uncontrolled traumatic PPH cases. PAE is safe and effective. Internal iliac artery

embolization is emerging as a successful alternative to surgery. Timely and accurate intervention can be life saving avoiding major surgeries and preserving the fertility aspect and improving the overall well being of the mother.





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15) A Rare case of vulval edema post laparoscopic myomectomy

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Abstract: Vulval oedema is a rare complication in gynaecology most often seen with severe preeclampsia, very few case reports of vulval oedema following laparoscopic myomectomy. We report a case of 28 yr women with vulval oedema following laparoscopic myomectomy which was managed conservatively resolved after 9 days post-surgical. Vulval oedema following surgery is a benign condition which is easy to manage.

Key words: Vulva, oedema, myomectomy, MRI Magnetic resonance imaging

Introduction:

Vulval oedema is one of the rare complications after laparoscopic myomectomy. Till date only five case reports of vulval oedema related to gynaecological laparoscopy have been reported. The mechanism of post myomectomy vulvar oedema is unclear.

Case details:

28 yr old women was diagnosed with huge fibroid uterus accidentally when she went for a pregnancy confirmation ultrasound.as she wasn't willing to continue the pregnancy was terminated by medical method and planned for laparoscopic myomectomy. Preoperative investigations were with in normal limits. Her MRI scan report (Fig1) showed a 10x10 cm fibroid occupying the lower body of uterus and cervix. Laparoscopic myomectomy after uterine artery coagulation was done .18 hrs post-surgery, she complained of discomfort in vulval region on examination bilateral vulva and mons pubis was oedematous (Fig2). Glycerine and Magnesium sulphate dressing was applied for 7days reduced spontaneously no other complications of ascites, limb oedema or anasarca

Discussion: Vulval edema is a rare complication following laparoscopic myomectomy. Exact mechanism of vulvar oedema is unclear. It is believed as a result of the following hypothesized mechanism.

1.Due to unhealed puncture tract permits ascites to travel through and accumulate in labia majora, similar to Conn's post paracentesis(1)

2.Expansion of interstitial fluid volume along with disturbance of lymphatic drainage during surgery

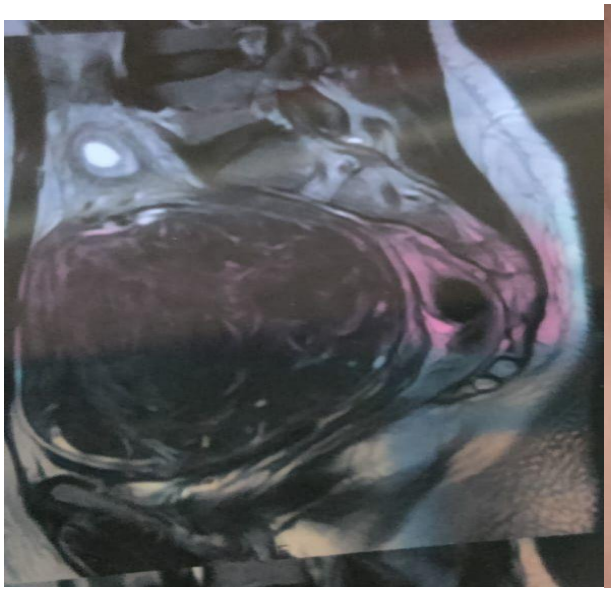
3.A patent canal of Nuck has been proposed as the underlying anatomical factor where in female has processes vaginalis opening into inguinal canal

4.Contributory factors: Prolonged improper positioning also leads to postoperative oedema in dependent areas.

Management of post-surgical vulval oedema is simple which is done by elevating the foot end to improve the venous return, compression garment helps if associated with limb

oedema(2), NSAIDS for alleviation of pain along with Ice pack, glycerine and Magnesium sulphate dressing to reduce the size and discomfort of the vulval region which resolves within 2-3 days if mild and with in 7 days if moderate to severe.

Conclusion: Its uncommon surgical complication though self-limiting but should be informed during counselling to patients before surgery. This emphasises the need of proper positioning of the patient to avoid prolonged pressures at vulnerable areas, minimize tissue handling and unnecessary tissue trauma



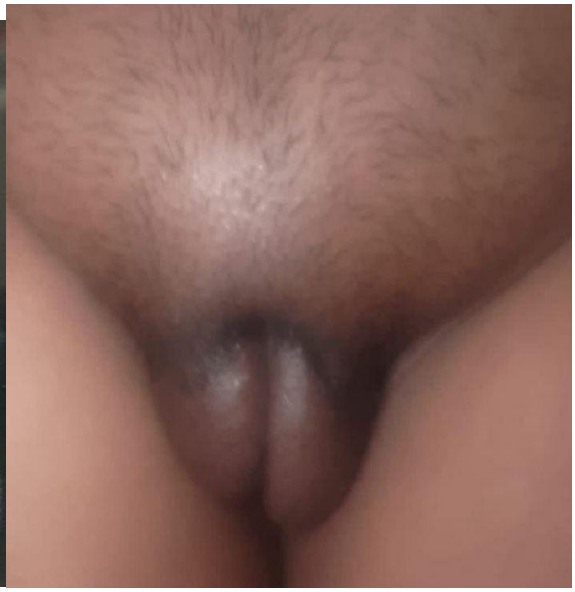


Fig 1 MRI image of fibroid Fig 2 Vulval edema

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16) SPONTANEOUS BROAD LIGAMENT HEMATOMA FOLLOWING VAGINAL DELIVERY: MULTIDISCIPLINARY MANAGEMENT OF HYPOVOLEMIC SHOCK AND MULTI-ORGAN DYSFUNCTION

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ABSTRACT

This case presents an 18-year-old woman, who underwent normal vaginal delivery, complicated by the formation of large broad ligament hematomas and hypovolemic shock. She was transferred to our tertiary care centre on postpartum day one with persistent hypotension, requiring intensive resuscitative measures and uterine artery embolization. The patient's condition was further complicated by acute renal failure, disseminated intravascular coagulation (DIC), and respiratory distress leading to intubation, multiple blood product transfusions and hemodialysis requirement. Through aggressive, multidisciplinary management involving interventional radiology, critical care, and nephrology, she achieved complete recovery. This case underscores the need for rapid diagnosis and intervention in complex PPH cases to prevent maternal morbidity and mortality.

KEYWORDS

Postpartum haemorrhage, broad ligament hematoma, hypovolemic shock, uterine artery embolization, acute renal failure.

INTRODUCTION

Postpartum haemorrhage (PPH) is a leading cause of maternal morbidity and mortality. Etiologies of PPH include atony, retained placental fragments, genital tract lacerations, or vascular injury, as seen with broad ligament hematomas. These hematomas, though rare, can complicate PPH by creating a concealed bleeding source that exacerbates hypovolemia, posing diagnostic and therapeutic challenges. Management options for PPH range from medical interventions like uterotonics to invasive procedures such as embolization or, in refractory cases, hysterectomy. Uterine artery embolization, an interventional radiology procedure, offers a minimally invasive alternative to surgery and is especially valuable for patients who wish to preserve fertility. This case report details the presentation, diagnosis, and successful management of a young patient with PPH complicated by broad ligament hematomas, hypovolemic shock, and multi-organ dysfunction.

CASE PRESENTATION

An 18-year-old P_1L_1 presented to our facility on postpartum day one after delivering a healthy baby boy via normal vaginal delivery at an outside hospital. She was referred due to severe, persistent hypotension (blood pressure of 80/60 mmHg) and tachycardia (heart rate of 170 bpm), indicating hypovolemic shock unresponsive to initial fluid resuscitation. Upon arrival, she was receiving noradrenaline at 10 mL/hour for circulatory support.

Her initial assessment was concerning for postpartum haemorrhage (PPH) with internal bleeding, as evidenced by abdominal tenderness and signs of ongoing blood loss. Laboratory workup revealed anaemia with a haemoglobin level of 6 g/dL, thrombocytopenia (platelets at 50,000/µL), and leukocytosis (WBC 44,900/µL). PT/aPTT/INR and d-dimer levels were

elevated, low fibrinogen levels (85 mg/dL) suggesting coagulopathy. Renal function tests indicated acute kidney injury (creatinine at 2.9 mg/dL), while a 2D echocardiogram showed global hypokinesia with an ejection fraction of 42%, raising concern for septic cardiomyopathy.

Ultrasound and subsequent CT imaging of the abdomen revealed bilateral broad ligament hematomas (right side 10x4.5 cm and left side 5x4 cm) with minimal hemoperitoneum. CT angiography demonstrated active extravasation from the uterine artery, along with a partially thrombosed inferior vena cava (IVC) and dilated, tortuous ovarian and uterine arteries, indicating significant vascular involvement. Bilateral uterine artery embolization was performed emergently to control the ongoing haemorrhage.

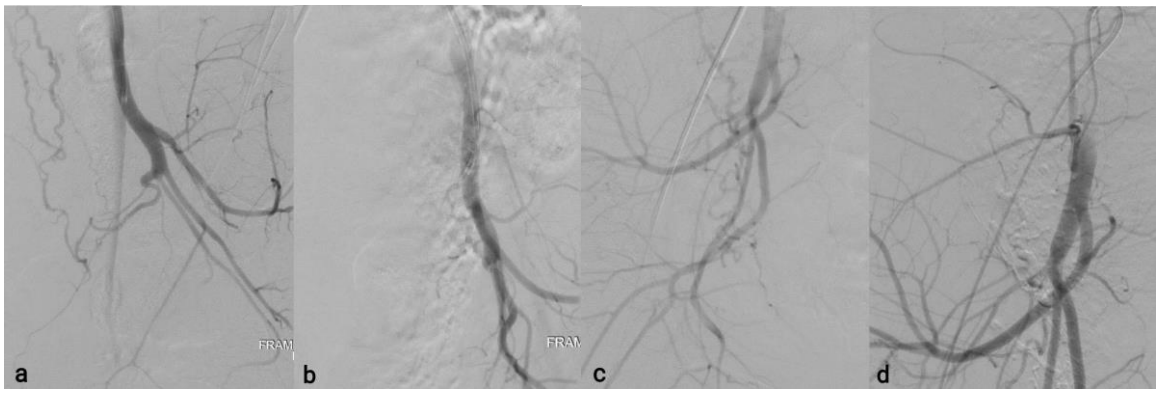

Figure: Conventional angiography of the uterine artery, illustrating embolization. (a) Left uterine artery before embolization (b) Left uterine artery post-embolization, showing successful occlusion (c) Right uterine artery before embolization (d) Right uterine artery post-embolization, indicating effective vascular occlusion.

Despite stabilisation efforts, the patient's renal function deteriorated, with oliguria (5-10 ml/hr) and persistently elevated creatinine levels up to 7.6mg/dl, necessitating consultation with nephrology and the initiation of dialysis. A total of 16 hemodialysis sessions were required to manage her acute kidney injury over 19 days. Additionally, she exhibited signs of respiratory distress and was found to have bilateral pleural effusions on high-resolution CT (HRCT), consistent with acute respiratory distress syndrome (ARDS). She was subsequently intubated and managed with mechanical ventilation. Over the next several days, the patient received extensive transfusion support, including 7 units of packed red blood cells to correct anaemia, 4 single-donor platelet (SDP) transfusions to address thrombocytopenia, and 2 albumin infusions for volume support. With a comprehensive multidisciplinary approach, the patient achieved complete resolution of multi-organ dysfunction and was subsequently discharged in stable condition with a serum creatinine level of 2.9 mg/dL and was advised to continue regular follow-ups and dialysis as needed.

DISCUSSION

This case highlights the critical and complex nature of managing PPH complicated by broad ligament hematomas. Broad ligament hematomas, which often arise from vascular injuries during caesarean or operative deliveries, are uncommon but critical causes of internal haemorrhage. Occurrence following vaginal delivery is particularly rare, with an estimated incidence of approximately 1 in 20,000 deliveries and can be a serious cause of internal haemorrhage in postpartum women. They may remain undetected following vaginal delivery

due to their retroperitoneal location and often present with delayed signs of haemorrhage, such as hypovolemic shock and abdominal pain, as seen in this patient. The formation of a broad ligament hematoma is often insidious, with concealed blood loss that can rapidly deplete intravascular volume, leading to shock and organ hypoperfusion.

The decision to perform uterine artery embolization was essential in controlling the bleeding and stabilising the patient. Uterine artery embolization is recognized as an effective alternative to hysterectomy, particularly in cases where fertility preservation is desired. This procedure has been shown to have high success rates in controlling broad ligament hematoma, and in this case, it allowed rapid hemostasis with minimal invasiveness.

This patient's progression to multi-organ dysfunction, including acute kidney injury (AKI) and ARDS, underscores the impact of prolonged hypoperfusion and the systemic nature of severe PPH. DIC, evidenced by elevated D-dimer and thrombocytopenia, is a common sequela in severe PPH due to the release of procoagulant factors and consumption of platelets and clotting factors.

Additionally, the patient developed respiratory failure, and HRCT findings were consistent with ARDS. This complication is often associated with septic shock and extensive transfusion support. ARDS management requires careful ventilatory support and is a known risk in obstetric patients undergoing critical care for PPH and sepsis.

CONCLUSION

This case demonstrates the importance of a multidisciplinary approach to managing complex PPH complicated by broad ligament hematomas and subsequent hypovolemic shock, DIC, AKI, and ARDS. Early recognition of concealed haemorrhage and hypovolemic shock, along with prompt intervention through uterine artery embolization, was crucial in stabilising the patient. Furthermore, coordinated support from nephrology, critical care, and interventional radiology ensured comprehensive management of multi-organ dysfunction, enabling her full recovery. The successful outcome emphasises the need for accessible interventional radiology and critical care expertise in tertiary centres to manage high-risk PPH cases effectively.

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17) CASE OF THE OVERSTAYING GUEST: ATYPICAL PRESENTATION OF INVASIVE MOLE WITH LOW B-HCG VALUES

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ABSTRACT:

Invasive mole is an uncommon form of gestational trophoblastic disease (GTD), typically following recognized pregnancies. It can occur after different pregnancy outcomes: 50% follow hydatidiform moles, 25% occur post-miscarriage or ectopic pregnancy, and 25% after term or preterm pregnancies. This case report describes a 32-year-old woman (P2L1D1A6) who presented with acute hemorrhagic shock after undergoing a check curettage due to a missed abortion. Initial stabilization and resuscitative measures were implemented, and differential diagnoses of arteriovenous (A-V) malformation and invasive mole were considered. To control bleeding before biopsy, uterine artery embolization (UAE) was performed, followed by a hysteroscopic-guided biopsy. Although initial histopathology suggested retained products of conception, a subsequent review ultrasound (USG) revealed an enlarging lesion with increased vascularity and loss of fat planes radiologically showing invasive mole, prompting a total abdominal hysterectomy. Histopathological analysis of the uterus confirmed an invasive mole diagnosis, despite low β-hCG levels throughout the patient's course.

KEYWORDS:

Invasive mole, β-hCG, uterine artery embolization, hysteroscopic biopsy, hysterectomy, iliac lymph node

INTRODUCTION:

Invasive mole, a malignant type of GTD, is distinguished by its potential for extensive myometrial invasion and its metastatic capability. Occurring in about 10-15% of complete molar pregnancies, an invasive mole is clinically significant due to its tendency to penetrate the myometrium deeply, sometimes extending into adjacent structures.

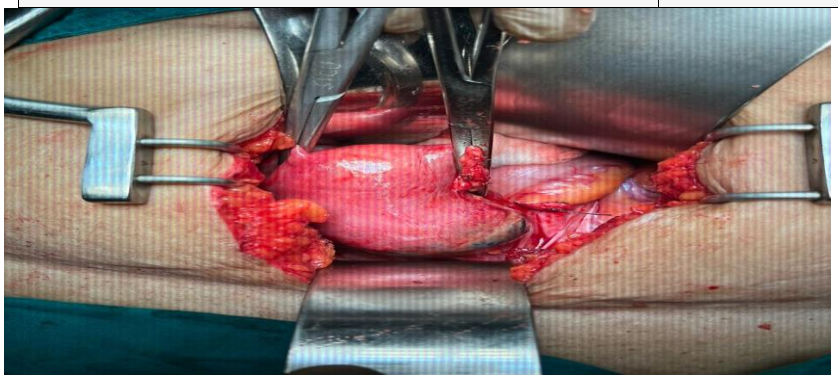
CASE PRESENTATION:

A 32-year-old woman (P2L1D1A6) was diagnosed with a missed abortion, for which she self-administered an MTP kit on August 1, 2024, resulting in partial product expulsion within three days and continued spotting. After heavy bout of bleeding on August 14, 2024, she sought emergency care from a local physician, who performed a curettage. The patient was then referred to NRIGH with acute haemorrhagic shock on August 15, requiring stabilization with two units of packed cell transfusions. A subsequent USG revealed a 2x2 cm lesion with increased vascularity empty cavity with no retained products of conception, leading to a provisional diagnosis of A-V malformation or molar pregnancy.

Date	β-hCG values
15/8/2024	2165MIU/ml
18/8/2024	1861MIU/ml
20/8/2024	534MIU/ml
22/8/2024	<0.100MIU/ml

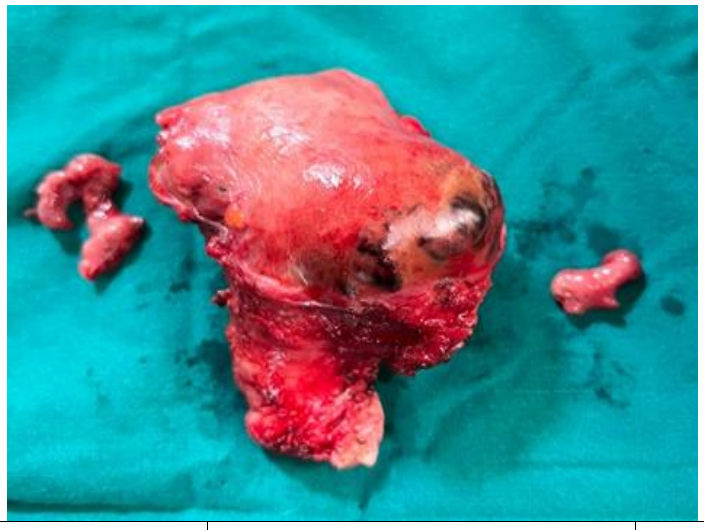
On August 28, the patient's β-hCG levels were observed to rise slightly, prompting a review USG on August 29, which showed a cystic area (5x4 cm) with increased vascularity at the uterocervical junction, infiltrating the full myometrial thickness. Given the lesion's persistence and expansion, invasive mole was suspected. MRI on August 31 confirmed a 5.6x5.1x4.5 cm lesion in the lower uterine segment, with posterior infiltration to the serosa and focal loss of fat planes, extending anteriorly toward the cervix and abutting the bladder.

28/8/2024	515MIU/ml
5/9/2024	179.8MIU/ml
12/9/2024	69.6MIU/ml
21/9/2024	13.10MIU/ml
16/10/2024	<0.100MIU/ml
3/9/2024	<0.100MIU/ml



In light of low β-hCG levels, a molar pregnancy was deemed unlikely; however, UAE was performed on September 10 to manage vascularity before further intervention. Follow-up imaging showed a hyperechoic lesion with cystic regions and mild vascularity, so a hysteroscopic-guided biopsy was conducted. During the hysteroscopy, a yellowish tissue noted with no vascularity above the internal os. The biopsy indicated retained products of conception. However, review USG continued to show lesion growth and increased vascularity, prompting a total abdominal hysterectomy with bilateral salpingectomy and iliac lymph node dissection. Histopathological examination confirmed an invasive mole

diagnosis,, non-secretory endometrium with extensive hemorrhagic necrosis, chorionic villi penetrating more than half of the myometrial depth, and evidence of vascular invasion.



WHO prognostic scoring system:Age	<40	0
Antecedent pregnancy	Abortion	1
Interval from index pregnancy	<4 months	0
Pretreatment hCG	$<10^3$ MIU/ml	0
Largest tumour size	5 cm	2
Number of metastasis	-	0
Site of metastasis	-	0
previously failed chemotherapy	-	0
total score		3

Low risk 0-4

DISCUSSION:

Invasive mole, previously termed chorioadenoma destruens, is a rare and distinct GTD characterized by deep myometrial invasion by trophoblastic tissue and intact villi, with potential spread to adjacent tissues. Unlike typical molar pregnancies, invasive mole presents with extensive tissue involvement and can metastasize. β-hCG monitoring plays a crucial role in diagnosis; however, levels can be misleadingly low in cases of the “hook effect” – an artifact that causes falsely low readings in the presence of extremely high β-hCG levels. Although this effect was ruled out after biochemical confirmation, low β-hCG levels persisted in this case, complicating the initial diagnosis.

Clinical presentation and diagnosis:

Patients with invasive mole often exhibit persistent or recurrent vaginal bleeding, accompanied by an abnormally elevated or plateaued β-hCG level. Clinical symptoms may overlap with those of a molar pregnancy, but the persistence of symptoms despite interventions can indicate invasive disease. The differential diagnosis includes retained products of conception and A-V malformations, particularly when β-hCG levels are low or ambiguous. Comprehensive diagnosis relies on serial β-hCG monitoring, advanced imaging techniques like ultrasound and MRI, and definitive histopathological analysis.

Treatment and management:

Chemotherapy is the primary treatment for invasive mole, often with single-agent methotrexate or actinomycin D. For patients with low metastatic risk and completed family, surgical options, such as hysterectomy, are considered, particularly when the disease is localized or unresponsive to chemotherapy. This approach is supported by the patient's persistent lesion, which showed no significant β-hCG elevation and a poor response to initial interventions. Although UAE and biopsy initially suggested a benign process, the lesion's persistence warranted further exploration, leading to hysterectomy and definitive diagnosis.

In certain patients, β-hCG levels may plateau at low levels, even without overt metastatic disease, in a phenomenon known as "quiescent hCG." This dormant trophoblastic activity does not usually require immediate treatment, though 20% of cases may eventually show progression.

CONCLUSION:

This case highlights an atypical presentation of invasive mole in a 32-year-old woman experiencing hemorrhagic shock post-abortion with persistently low β-hCG levels. UAE, followed by hysteroscopic-guided biopsy and eventual hysterectomy, facilitated a definitive diagnosis despite early indications of retained products of conception. Histopathology ultimately confirmed invasive mole. This case underscores the importance of rigorous follow-up and thorough histological assessment in patients with persistent trophoblastic disease-like presentations, even when β-hCG levels remain low.

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18) AN ADNEXAL SWIRL IN AN ADOLESCENT

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ABSTRACT: Isolated tubal torsion is an unusual cause of acute abdominal pain in young sexually inactive girls. A 13year adolescent with complaints of lower abdominal pain and vomitings. On USG 8.3x4.6cms tubular cystic lesion noted. Laparoscopic right salpingectomy was done. Isolated tubal torsion is less frequent in children less than 18yrs of age.

KEY WORDS: Hydrosalpinx, tubular cystic lesion.

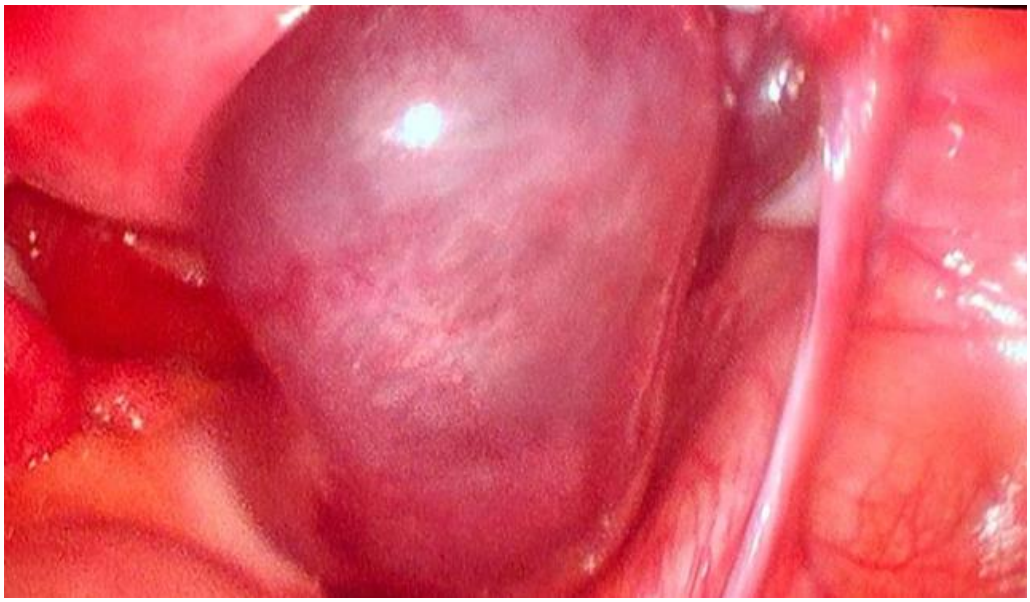
INTRODUCTION: Hydrosalpinx in pre-pubertal children and non-sexually active adolescents is a rare finding. Isolated tubal torsion is an unusual cause of pain abdomen in young sexually inactive patients. It is the rotation of the tube around its longitudinal axis, while the ovary and its blood flow remain unaffected.

CASE PRESENTATION: A 13year old girl came with complaints of lower abdominal pain since 5 days associated with vomitings since 2 days. On examination, her blood pressure was 120/80mmHg, pulse rate 94bpm, temperature 98.4° fahrenheit. On per abdomen examination tenderness noted in the right iliac fossa. She attained menarche 5 months back and her LMP was on 9/10/24. On USG abdomen and pelvis, tubular cystic lesion of 8.3 X4.6 cm in the right adnexa extending to midline with evidence of internal septations noted. Laparoscopic right salpingectomy was done. Intraoperatively right fallopian tube appeared congested, tortuous, oedematous and was of size 8x6cms and was twisted 2 and half turns around the infundibulopelvic ligament.

DISCUSSION: Hydrosalpinx in early teenage is quite a rare condition. 2.6 per 1,00,000 cases incidence noted. Most common adnexal masses in adolescents include functional cysts, benign cystic teratomas, germ cell tumors of the ovary, epithelial cell tumors. Ectopic pregnancy and Tubo-ovarian abscess must also be considered. Keen observation and careful examination is required to adequately diagnose and treat the condition. Torsion more common on the right side because sigmoid colon on the left side acts as an obstacle.

CONCLUSION: Pain abdomen will often point towards gastroenteric pathology in adolescents. But the possibility of an adnexal mass must also be considered and treated accordingly. Isolated tubal torsion associated with hydrosalpinx in children and sexually inactive adolescents is an extremely rare condition. Ultrasonography with doppler should be

the primary imaging option, but laparoscopy remains the gold standard in both treatment and diagnosis.



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19) A RARE CASE OF METHOTREXATE TOXICITY IN ECTOPIC PREGNANCY

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ABSTRACT

Methotrexate is an antifolate drug used in the management of ectopic pregnancy and choriocarcinoma in gynaecology. It can cause various side effects & induce many types of toxicity (eg: Renal, Liver, Neuro, Hematological, Pulmonary, gastrointestinal, cutaneomucous toxicity). Leucovorin rescue provides the safe administration. Immediate discontinuation of MTX is of utmost importance. Monitorning of liver & kidney functions & avoiding drug interaction, alkalinization of urine, intravenous hydration, G-CSF and blood products benefits the patients.

Key Words: Methotrexate, side effects, toxicity, Leucovorin

INTRODUCTION

Methotrexate is an antifolate drug used in the management of ectopic pregnancy and choriocarcinoma in gynaecology. Renal excretion is the primary route of elimination and is dependent upon dosage and route of administration.

CASE REPORT

24 year old female was admitted to the emergency department with complaints of several raised lesions on limbs, oral mucosal inflammation with ulcerations, difficulty swallowing, abdominal pain, fever and chills for the past 24 hours. On taking the history and verifying her previous reports, it was ascertained that she was diagnosed with right ectopic pregnancy for which she consulted a doctor and was prescribed (MTX) 30 mg per day in divided doses. She had taken the prescribed medication for about 7 days, total of 210 mg (MTX). She has no past history and family history of drug allergy. On clinical examination there were multiple raised lesions on both upper and lower limbs, front and back of trunk and on face. There were multiple large erosions on oral mucosa, lips and diffuse edema of face and lips. Later she developed hyperpigmented plaques with crust formation on the lower extremities. Ultrasonography revealed a well defined heterogeneously hyperechoic mass lesion with peripheral vascularity of size 4.8x3.3x2.8 cm in the right adnexa, medial to and abutting the right ovary. Well defined extra uterine gestational sac of size 1.5x1.0 cm noted within the right adnexal mass. Fetal pole noted within the sac with Crown rump length (CRL) of 1 cm corresponding to gestational age 7wks 3days with no fetal cardiac activity. She was on Folinic acid, Antibiotics, Granulocyte colony stimulating factor. She underwent right salpingectomy for right tubal ectopic pregnancy with failed medical management by methotrexate. She was regularly monitored and as her condition was getting better, she was discharged after14 days.

LABORATORY INVESTIGATIONS: On admission Haemoglobin- 9.8 gm/dl, RBC - 4.35 millions/cumm, WBC -2900 cells/cumm, Platelet count- 3.2 lakhs/cumm, ESR- 60 mm/hr, Creatinine -0.8 mg/dl, BETA HCG -2586 mIu /ml. AST- 23 U / L, ALT-17 U / L, Total bilirubin-1.5 mg/dl, Direct bilirubin -0.2 mg/dl, PT -14.1 sec, APTT- 25.1 sec, INR-1.17

Day	Admission day	1	2	3	4	5	6	7	8
Hemoglobin(gm/dl)	9.8	8.7	9.2	9.4	9.5	8.9	8.7	8.1	8.3
RBC(millions/cumm)	4.35	3.8	4.0	4.2	4.1	3.9	3.8	3.5	3.6
WBC(cells/cumm)	2900	700	1000	800	900	1300	4100	16400	23620
Serum creatinine (mg/dl)	0.8	0.6	0.6	0.5	0.6	0.8	0.7	0.8	0.7

DISCUSSION

Ectopic pregnancy occurs in around 1% of pregnant women and may seriously compromise women's health and future fertility. Methotrexate is an affordable drug and when used in low doses, does not lead to toxicity and is widely used in patients with unruptured ectopic pregnancy. HansaDhar et al in their study concluded that Methotrexate has proven to be an effective medical management for ectopic pregnancies in a society where tubal conservation is of utmost importance. The adverse effects of MTX are caused by irreversible inhibition of the enzyme dihydrofolatereductase in purine synthesis. However cutaneous ulceration may be considered as an early clinical sign of imminent systemic toxicity and patients may only present with isolated cutaneous lesions, which is similar to our case with multiple mucosal ulcerations of oral cavity. RevaTripathi et al. reported similar complaints with methotrexate toxicity in their article. Though an useful drug,sideeffectslikemucositis,hepatotoxicity, nephrotoxicity, and myelosuppression are seen. Hence patients on methotrexate need regular laboratory tests to monitor their kidney function, liver function, and blood counts. Methotrexate is contraindicated for use in patients with hypersensitivity reactions to this medication. Pregnant or breastfeeding women should avoid using methotrexate due to the elevated risk of teratogenicity and excretion into breast milk. Mahboob reported a success rate of 80% by treating 12 out of 15 women with single dose MTX with initial β-hcg levels equal to 5000mIU/ml. In the present case was MTX used as a medical treatment modality for ectopic pregnancy, which unfortunately failed and rather the patient presented with drug reactions. High-dose methotrexate (HDMTX) is the term for doses higher than 500 mg/ml. Patients may experience nausea, mucosal ulceration, alopecia, fatigue, fever, increased risk of infection, leukopenia, GI bleeding, pancreatitis, cirrhosis, aplastic anemia, malignancy (lymphoproliferative disorders), infections, interstitial pneumonitis, renal impairment, and teratogenesis. Simultaneous use of MTX with drugs interacting with it such as proton pumpinhibitors,trimethoprim/sulfamethoxazole,doxycycline,non-steroidal anti-inflammatory drugs (NSAIDs), and salicylates that decrease protein binding or reduce renal clearance, as well as excessive alcohol consumption could play an important role in this regard. Nephrotoxicity due to MTX rarely occurs in treatment with high doses. A slight decrease in

creatinine clearance can be seen even at low, weekly doses used in rheumatoid diseases. The renal function tests were monitored continuously in the present and were found normal. Immediate discontinuation of MTX is of utmost importance. Supportive measures include leucovorin (folinic acid), alkalinization of urine, intravenous hydration, G-CSF and blood products. Reza bidaki et al. In their studies reported patients who were managed similarly. Leucovorin is the reduced active form of folic acid. It rescues normal cells from the toxic effects caused by MTX's inhibition of reduced folates. Transfusion of platelets and/or packed red cells may be needed in patients with severe thrombocytopenia, anemia, or hemorrhage. The patient should be closely monitored for signs of bleeding, clinical evidence of infection, abnormalities in serum electrolytes, renal failure and hepatic function. Even though MTX toxicity can be a fatal with proper management, early diagnosis and follow-up of the patients can resolve the complications and save the patients' lives.

CONCLUSION

Though methotrexate is an easily available useful drug, the side effects should be considered before administration. We report this case of methotrexate toxicity, to provide insights regarding the drug reactions, need for close monitoring and laboratory work up