Gestational Trophoblastic Disease: Pitfalls in Management

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I have nothing to declare

اليوم العلمي الشهري

الجمعيه الاكلينيكيه للنساء والتوليد

الخميس 20 فبراير 2025 الساعه 2 ظ

المنصوره مركب بيراميزا

	Prof	subject
2.30	Ahmed badawi	Resistant anaemia in pregnancy
3.00	Reda elshoky	Gestational trophoplastic disease
3.30	الشركه الفرعونيه	Company talk

رئيس الجمعيه: ا.د. ابوبكر النشار

نائب الرئيس : د عبد الفتاح الحنفي

سكرتير الجمعيه : د اكرم الاجاوي

امين الصندوق : د السيد القللي

مقرر اليوم د صديق البرعي

Agenda:

1. Diagnosis of molar pregnancy: partial mole versus missed abortion.
2. Pitfalls in treatment of molar pregnancy:
    - Cervical ripening.
    - Medical evacuation.
    - Oxytocin infusion.
    - Post-molar care.
3. Molar pregnancy with a living fetus.
4. Recurrent molar pregnancy
5. Misdiagnosis of GTN.

Most of pitfalls is due to lack of GTD awareness

- **Gestational trophoblastic disease (GTD) is a proliferative disorder of trophoblastic cells.**
- **Benign**: complete and partial moles.
- **Malignant (GTN):**

  -Invasive mole.

  -Choriocarcinoma.

  -PSTT

  -Epithelioid TT.

  - Postmolar GTN.

Diagnosis of molar pregnancy:

Partial mole versus missed miscarriage

Partial moles usually present clinically as missed miscarriage.

-The uterine size is usually only mildly increased or may be decreased for the gestational age.

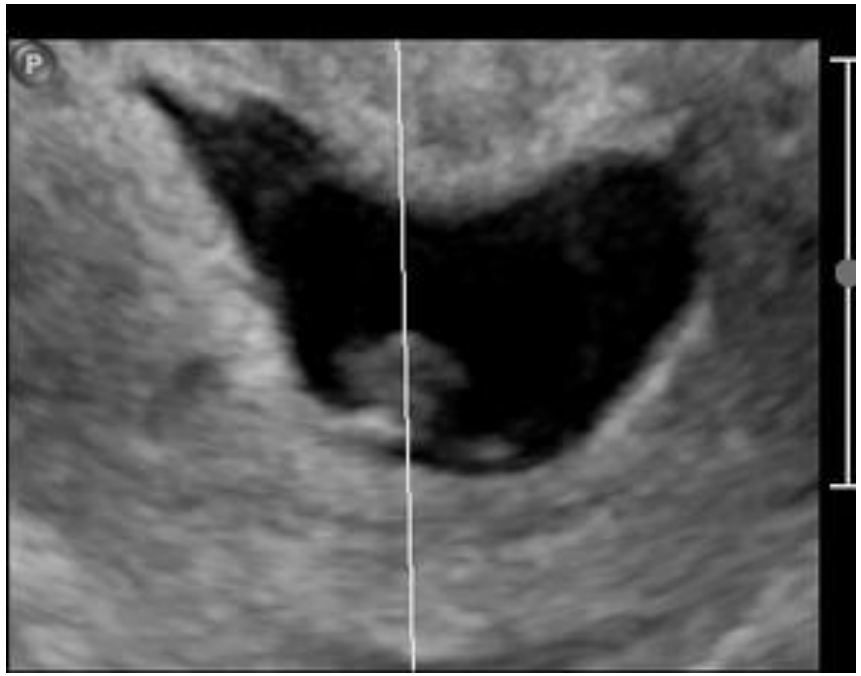
-The serum β-hCG is generally lower than in complete moles BUT more than missed miscarriage.

The following two criteria were found to be significantly associated with the diagnosis of partial mole:

1) Ratio of transverse to anteroposterior dimension of the gestational sac greater than 1.5.
2) Cystic changes, irregularity, or increased echogenicity in the decidual reaction/placenta or myometrium.

Fine C, Bundy AL, Berkowitz RS, Boswell SB, Berezin AF, Doubilet PM. Sonographic diagnosis of partial hydatidiform mole. Obstet Gynecol. 1989 Mar;73(1):414-8.

Missed miscarriage

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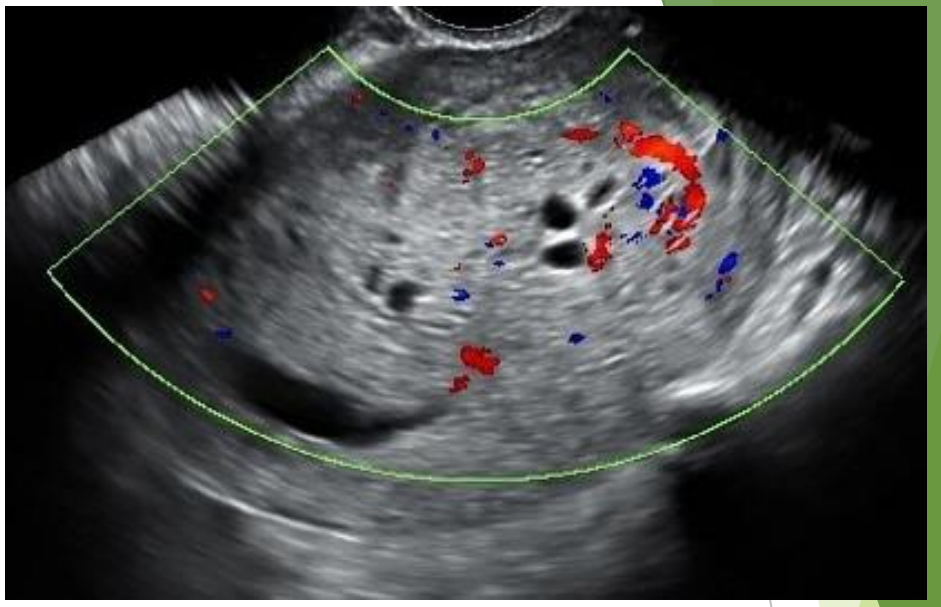


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Histopathologic examination of products of conception: Should be routinely performed.

Histological examination of pregnancy tissue in the diagnosis of GTD

Should pregnancy tissue from all miscarriages be examined histologically?

The histological assessment of material obtained from the medical or surgical management of all miscarriages is recommended to exclude trophoblastic neoplasia if no fetal parts are identified at any stage of the pregnancy.

Grade of recommendation: D

Women who receive care for a miscarriage should be recommended to do a urinary pregnancy test 3 weeks after miscarriage. *[New 2020]*

Grade of recommendation: ✓

Pitfalls in treatment of molar pregnancy

RCOG- Green Top Guidelines (2020)

-Pre-evacuation: hCG, CXR, prepare blood transfusion.

-Suction evacuation: soft plastic cannula under ultrasound guidance.

-Misoprostol or PGs for cervical ripening:

Short dose.

Just before suction evacuation.

- Oxytocin:

-At end of procedure.

- During procedure: If life-threatening bleeding.

BJOG An International Journal of Obstetrics and Gynaecology
Royal College of Obstetricians & Gynaecologists

RCOG Green-top Guideline | Free Access

Management of Gestational Trophoblastic Disease

Green-top Guideline No. 38 – June 2020

First published: 29 September 2020 | https://doi.org/10.1111/1471-0528.16266 | Citations: 19

Anti-D prophylaxis is recommended following removal of a molar pregnancy.

Grade of recommendation: ✓

Is it safe to prepare the cervix prior to surgical removal?

Preparation of the cervix immediately prior to uterine removal is safe.

Grade of recommendation: D

Can oxytocic infusions be used during surgical removal?

Excessive vaginal bleeding can be associated with surgical management of molar pregnancy and the involvement of an experienced clinician is advised.

Grade of recommendation: ✓

The use of oxytocic infusion prior to completion of the removal is not recommended.

Grade of recommendation: ✓

Negligence in Prophylactic chemotherapy:

-Given for high-risk moles: one or more of the following:

- Age > 40 yrs.
- B-hCG >100,000 miu/ml.
- Uterus>16 weeks.
- Bilateral TL cysts.

-Reduce incidence of GTN from 47 to 13 %.

Cochrane Database of Systematic Reviews, 2017

Updates in post-molar follow up:

In the past: one year then….. 6 months.

Recently 3 months for CM and 1 month for PM after hCG normalization.

(Meta-analysis of Albright et al, 2020)

-COCs do not increase incidence of postmolar GTN or alter pattern of regression of hCG drop.

(Lybol et al, 2022)

Molar pregnancy with a living fetus

Three types are present; commonest is twins (CM + normal fetus)

1-No clear guidelines for management

2-US: exclude RP hematoma, degenerated myoma.

3-Karyotyping to exclude genetic abnormalities.

4- Serial hCG /month.

5- If no genetic or anatomic abnormalities: counseling.

6. Allow pregnancy continuation till complications (HG, pre-eclampsia, AP hemorrahge).

RCOG GTG, 2020

There is an increased risk of early fetal loss (40%) and premature birth (36%) in a twin pregnancy of a viable fetus and coexisting molar pregnancy. The incidence of pre-eclampsia is variable, with rates as high as 20% reported. However, in a large UK series, the incidence was only 4% and there were no maternal deaths.[52, 53] In the same UK series, there was no increase in the risk of developing GTN after such a twin pregnancy and outcome after chemotherapy was unaffected. Analysis of a further 153 UK cases confirmed the earlier experience, with a slightly higher rate of babies surviving (51%), no maternal deaths and no increase in the need for chemotherapy (15%) in the women who gave birth after 26 weeks of gestation.[52, 53]	Evidence level 2+

Some women may wish to continue with their pregnancy. Increased monitoring for pre-eclampsia, and fetal and maternal wellbeing during such ongoing pregnancies is sensible. Histological examination of the placenta is recommended and all confirmed cases of GTD registered with a GTD centre.	Evidence level 4

Case 1

- A 34 years old lady, history of primary infertility 14 years.

-Long history of investigations and treatment of infertility

-She got pregnant by ICSI.

-At 16 weeks of pregnancy; she was referred for pregnancy termination.

- Admitted to GTD unit, MUH with diagnosis of partial mole (large cystic placenta, high hCG).


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- The case were re-evaluated. Criteria oof conservative treatment were fulfilled. A phone call with the referring colleague to discuss the treatment plan.
- The case was counselled, discharged, and followed up with her Doctor.

-Delivery:

At 37 weeks; CS, normal baby. The normal and abnormal placenta were sent for histopathology.

-Result: Hydropic degeneration of one placenta& other placenta was normal.

-**Follow up after delivery:** free

RCOG Green Top Guidelines, 2020

How is twin pregnancy of a viable fetus and presumptive coexistent molar pregnancy managed?

Women diagnosed with a combined molar pregnancy and viable twin, or where there is diagnostic doubt, should be referred to a regional fetal medicine centre and GTD centre.

Grade of recommendation: ✓

In the situation of a twin pregnancy where there is one viable fetus and the other pregnancy is molar, the woman should be counselled about the potential increased risk of perinatal morbidity and the outcome for GTN.

Grade of recommendation: D

Prenatal invasive testing for fetal karyotype should be considered in cases where it is unclear if the pregnancy is a complete mole with a coexisting normal twin or a possible singleton partial molar pregnancy. Prenatal invasive testing for fetal karyotype should also be considered in cases of abnormal placenta, such as suspected mesenchymal hyperplasia of the placenta.

Grade of recommendation: D

Hemida *et al. BMC Pregnancy and Childbirth* (2022) 22:681
https://doi.org/10.1186/s12884-022-05004-3

Molar pregnancy with a coexisting living fetus: a case series

Reda Hemida[1*], Eman Khashaba[2] and Khaled Zalata[3]

Abstract

Background: Coexistence of molar pregnancy with living fetus represents a challenge in diagnosis and treatment. The objective of this study to present the outcome of molar pregnancy with a coexisting living fetus who were managed in our University Hospital in the last 5 years.

Methods: We performed a retrospective analysis of patients who presented with molar pregnancy with a coexisting living fetus to our Gestational Trophoblastic Clinic, Mansoura University, Egypt from September, 2015 to August, 2020. Clinical characteristics of the patients, maternal complications as well as fetal outcome were recorded. The patients and their living babies were also followed up at least 6 months after delivery.

Results: Twelve pregnancies were analyzed. The mean maternal age was 26.0 (SD 4.1) years and the median parity was 1.0 (range 0–3). Duration of the pregnancies ranged from 14 to 36 weeks. The median serum hCG was 165,210.0 U/L (range 7662–1,200,000). Three fetuses survived outside the uterus (25%), one of them died after 5 months because of congenital malformations. Histologic diagnosis was available for 10 of 12 cases and revealed complete mole associated with a normal placenta in 6 cases (60%) and partial mole in 4 cases (40%). Maternal complications occurred in 6 cases (50%) with the most common was severe vaginal bleeding in 4 cases (33.3%). There was no significant association between B-hCG levels and maternal complications ($P = 0.3$).

Conclusion: Maternal and fetal outcomes of molar pregnancy with a living fetus are poor. Counseling the patients for termination of pregnancy may be required.

Recurrent molar pregnancy

-2-3% of molar pregnancy.

-FRHM: all pregnancies were complete mole and positive family history.

-As a result of NLRP7 gene mutation.

-The gene present in the wall of most oocytes.

-No role of ICSI in our community (?Egg donation).

-Natural conception is the only hope to get normal pregnancy(1-2%)

Misdiagnosis of GTN

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Doctopic: Primary Research

Clinical Picture

Jonathan P

[PII_REPLACE]

Embargo: [add date when known]

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Avoid making a mountain out of an invasive hydatidiform mole: do a pregnancy test!

Reda Hemida, Helena C van Doorn

A 28-year-old Egyptian woman was referred to our specialised gestational trophoblastic disease clinic for treatment. She explained that 2 years earlier, her menstrual cycle had changed and become irregular with prolonged heavy bleeding lasting between 15 and 20 days; before this, her periods had been regular, lasting 30 days with 5 days of bleeding. The woman had two children and no history of contraceptive use, hormonal therapy, or any other medications. 3 months after the irregular bleeding methotrexate which led to remission.

Our case illustrates that a crucial investigation of the cause of uterine bleeding—which can be attributed to numerous conditions including fibroids, adenomyosis, and an invasive mole—is a pregnancy test. An ultrasound cannot clearly differentiate between some of the causes and an endometrial biopsy might not detect lesions located deep in the myometrium.

To reiterate, hCG levels in the urine should be checked

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concentration was 10 g/dL—importantly, her urine and serum human chorionic gonadotropin (hCG) levels were not measured. The bleeding did not improve, and she had dilation and curettage of the uterus, during which a biopsy specimen was taken from the endometrium: histology showed a disordered proliferative endometrium. The woman was advised to take a combined oral contraceptive pill, which only resulted in a reduction of the bleeding.

6 months later, a transvaginal ultrasound showed focal anterior myometrial thickening, with increased blood flow seen on Doppler ultrasound which was reported as being adenomyosis (figure). Hysteroscopic endometrial resection was recommended, but because of severe bleeding during surgery the procedure was not completed. The bleeding continued postoperatively and the patient's general condition deteriorated: her haemoglobin concentration dropped to 6 g/dL. She was given a blood transfusion to stabilise her condition and then returned to theatre for a life-saving, uncomplicated abdominal hysterectomy. Histopathological examination of the uterus showed an invasive mole with no evidence of uterine perforation. The serum hCG concentration was 550 IU/L, and she was treated with two courses of need for a hysterectomy.

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Contributors

We both contributed equally to the assessment of the patient, writing up the case, and preparing the figures. Written consent for publication was obtained from the patient.

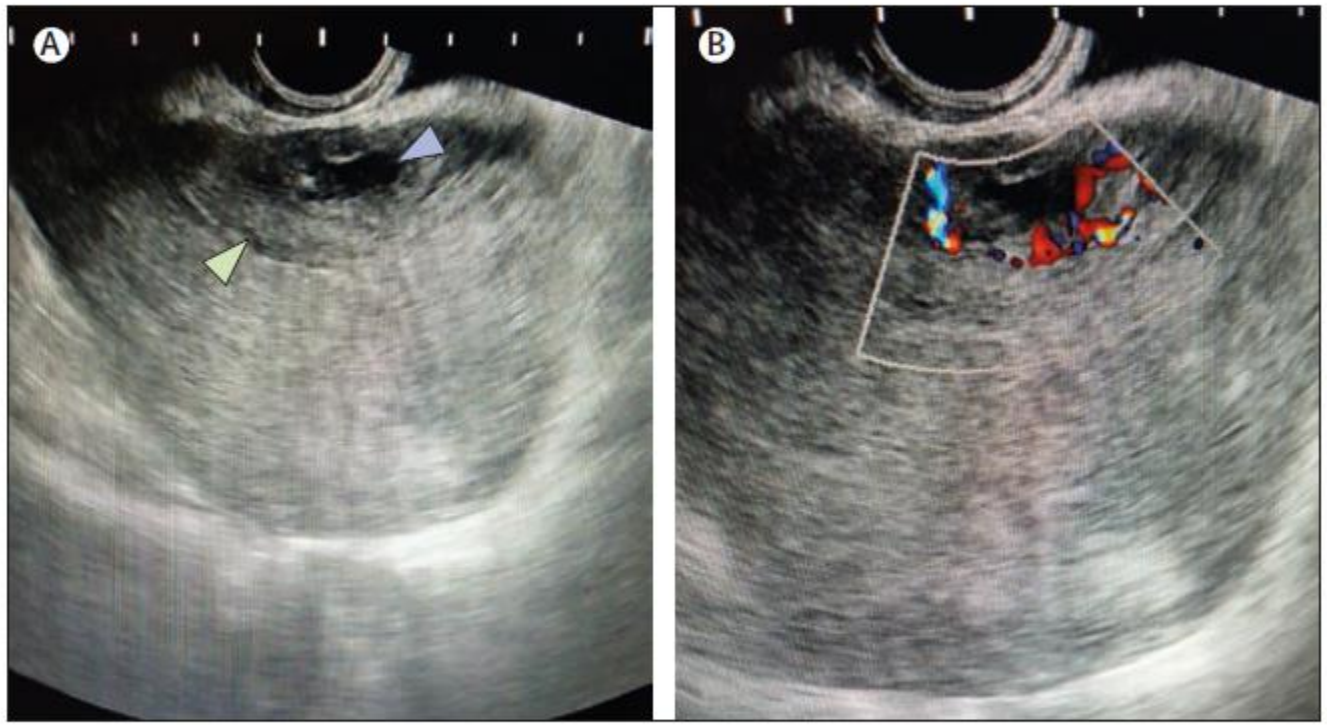
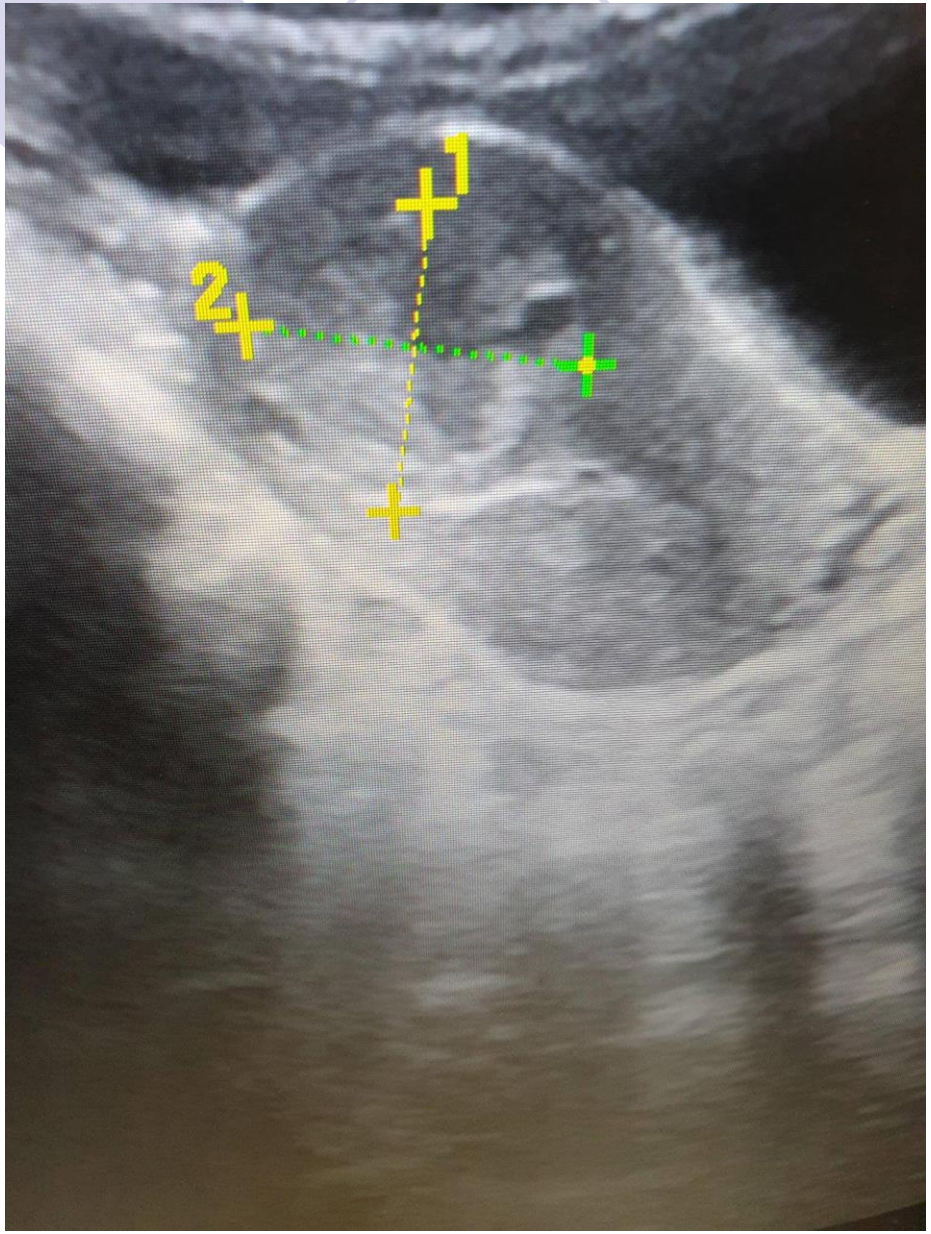


Figure: **Investigation of an invasive hydatidiform mole**

(A) Transvaginal ultrasound shows the endometrium (green arrowhead) and the mole (blue arrowhead) as an area of heterogeneous tissue (3 cm × 2 cm). (B) Colour Doppler ultrasound shows increased blood flow in the mole (B).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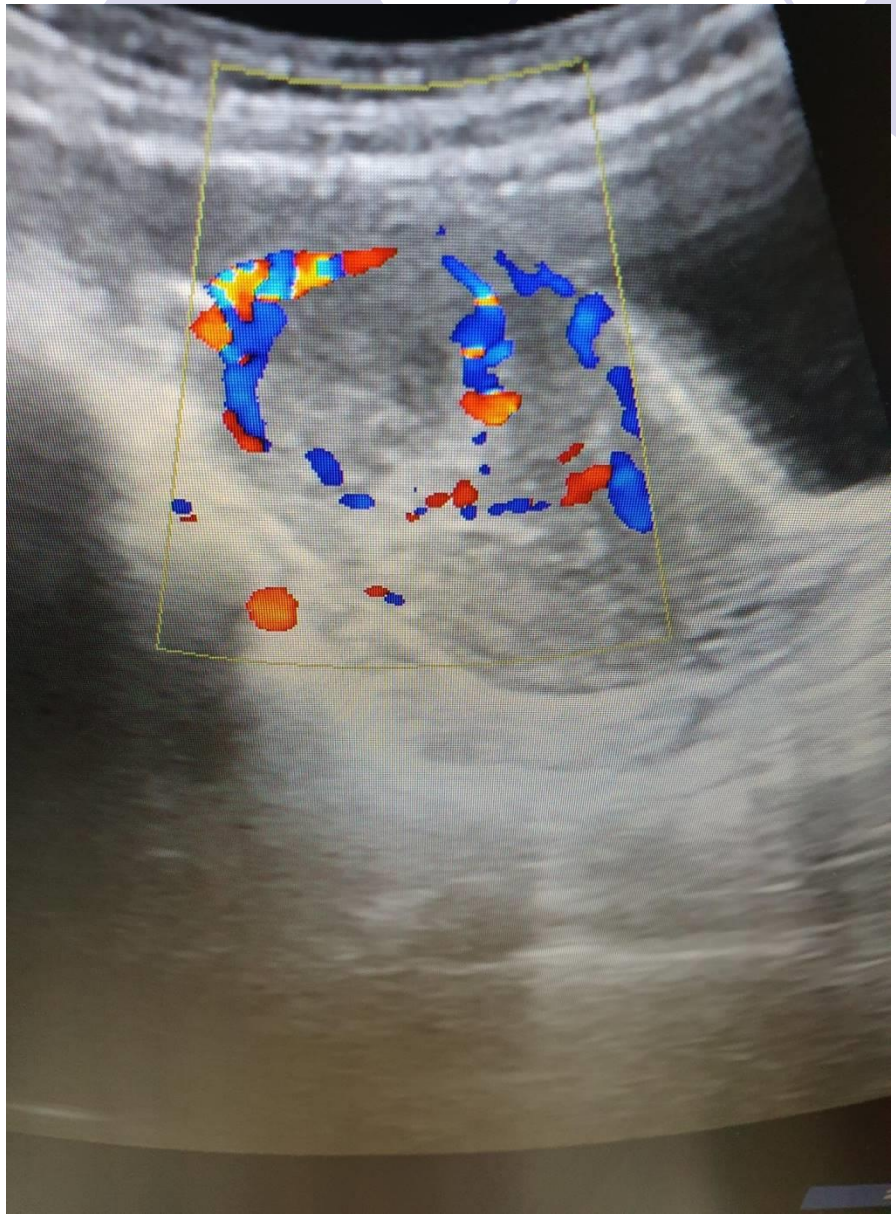

Egyptian National registry of GTD.

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الجمعية المصرية للحمل العنقودى وأورام المشيمة

EGYPTIAN SOCIETY OF STUDY OF TROPHOBLASTIC DISEASES (ESSTD)

Take Home Message

- Routine histopathology of products of miscarriage.
- Treatment of molar pregnancy: Suction evacuation under ultrasound guidance.
- Cervical ripening just before evacuation. No prolonged use of misoprostol.
- No Oxytocin during evacuation.
- Prophylactic chemotherapy for high-risk mole.
- Conservative management of Twins with a mole in specialized units.
- Pregnancy test should be the first investigation for AUB.

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