

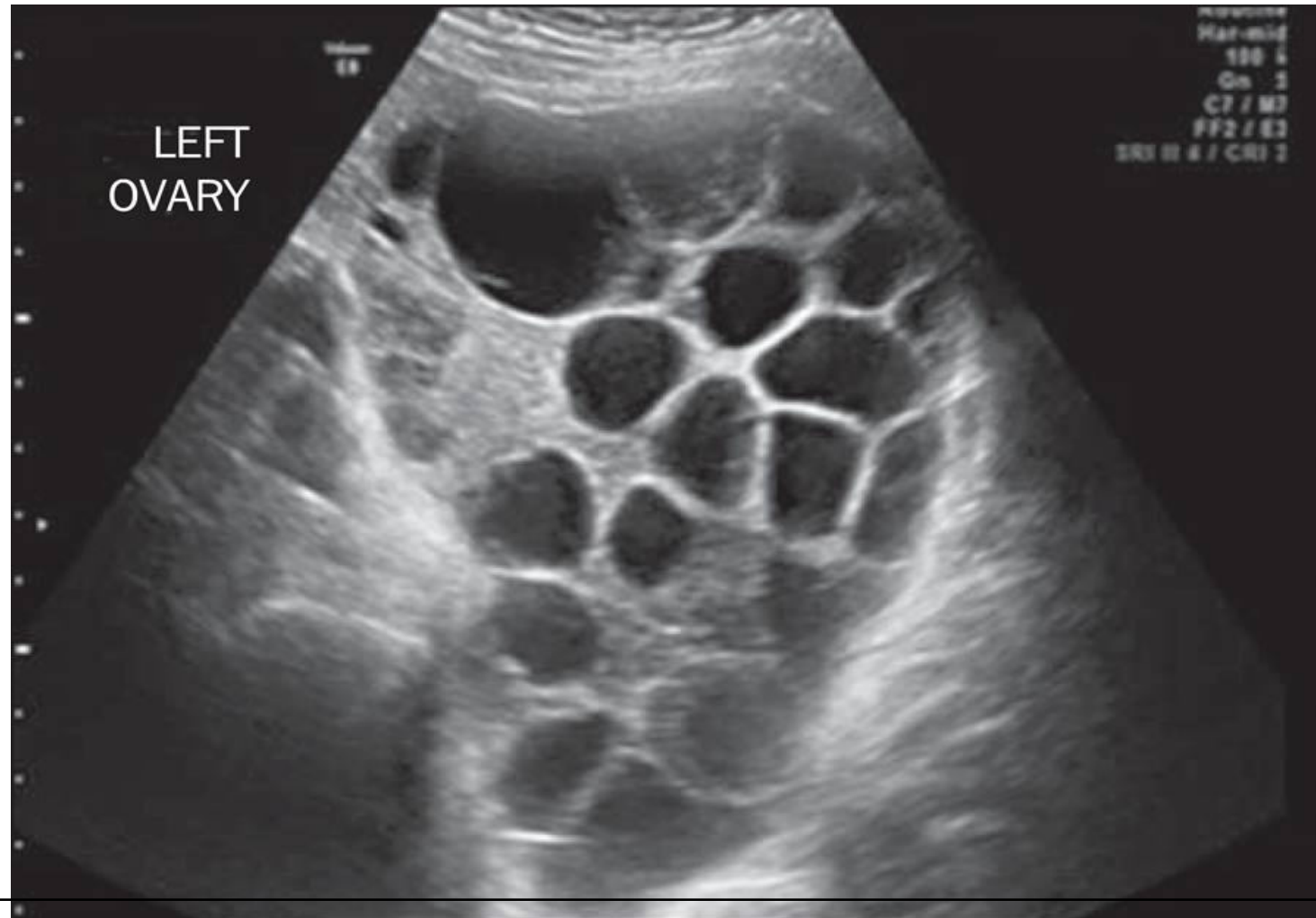
# INVESTIGATIONS



# ULTRASOUND

- Diagnostic.
- “”SNOW STORM”” appearance
- Theca lutein cysts in ovaries
- if partial mole – FETAL SHADOW
- focal cystic spaces in the placenta
- placenta with scattered cysts
- Absence of fetal shadow helps confirm a complete mole

# Thecalutein cyst.



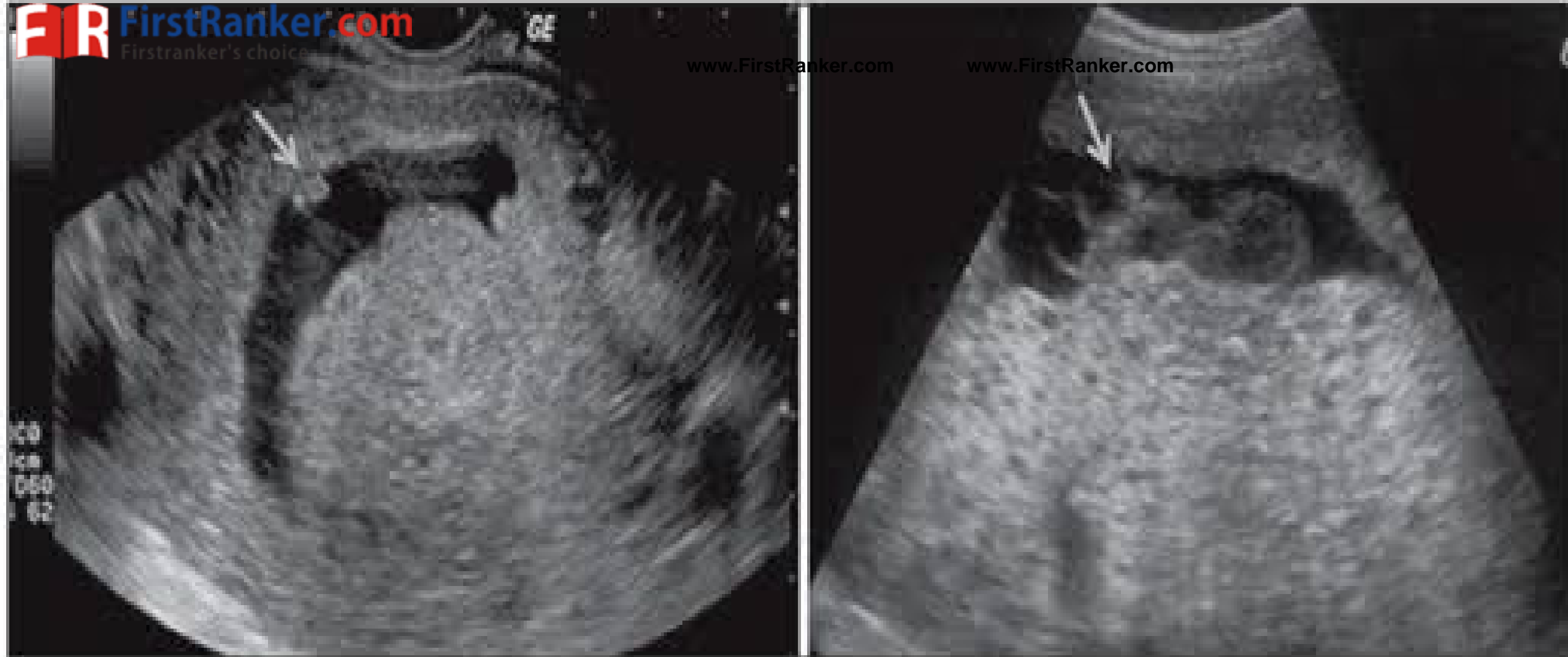
# Snowstorm appearance



Molar pregnancy (snow storm pattern)

# Partial mole





**Figure 10.** Sonographic signs of partial hydatidiform mole. Focal thickening of the placental bed with predominance of cystic areas and irregularity. Embryo or embryonic remains (arrows) can be visualized.

- **Doppler** – Absence of Fetal heart sound
- **Serum B-hCG**
  - High >40,000 mIU/ml
  - Role now limited to Post molar and post chemo followup
- **X ray chest** – to rule out embolization and pulmonary metastasis
- **CT chest, abdomen and brain**

## LIMITATIONS

- Early gestations- beta HCG not highly elevated.
- False negative usg where chorionic villi have not attained characteristic vescicular pattern - early gestations
- Only 20-30% of partial moles have sonographic evidence
- Diagnosis made from the histological view of abortal specimen



- In unclear cases with live fetus & desired pregnancy, **fetal karyotyping** is done for the triploidy.

# Histopathology

- Need to differentiate from **hydropic abortuses**
- Failed pregnancies from union of haploid egg & halpoid sperm.
- Show hydropic degeneration.
- **Complete moles-**
  - a) Trophoblastic proliferation
  - b) hydropic villi

# Partial moles

1. Two populations of villi
2. Enlarged dysmorphic villi with trophoblastic inclusions.
3. Enlarged cavitated villi
4. Syncytiotrophoblastic hyperplasia

# ANCILLARY TECHNIQUES

- Immunostaining of p57KIP2
- expressed only in tissues containing maternal allele.
- So absent in complete moles
- Molecular genotyping determines whether
- Diploid diandric
- Triploid diandric monogynic
- Biparental diploidy

# MANAGEMENT

## 2 PHASES

- IMMEDIATE EVACUATION.
- SUBSEQUENT FOLLOW UP.

# EVACUATION

- **SUCTION EVACUATION** is the treatment of choice irrespective of size of the uterus
- Cervical ripening agents like misoprostol- to dilate the cervix to facilitate evacuation, if needed
- Not given in nulliparous, as it increases uterine contractions & risk of embolisation to pulmonary vasculature

# PRE-OPERATIVE

- History and clinical evaluation.
- Laboratory tests:
  - Hemogram
  - Serum beta –Hcg
  - Creatinine
  - Hepatic amino transferase
  - TSH, free T4 levels
  - Blood grouping, screening and crossmatch



- Chest radiograph
- Ultrasound pelvis to exclude pregnancy
- Adequate cross matched blood has to be arranged
- Iv infusion started (chance of heavy bleeding)
- CT or MRI of head for brain metastasis.

# INTRAOPERATIVE

- Large bore IV catheters
- Done in local anaesthesia. Regional and general used if needed.
- Karman cannula –size 6 or 8
- Consider sonography machine.
- If significant haemorrhage prior to evacuation, surgical evacuation should be done, The need for oxytocin infusion weighed up against the risk of tumour embolisation.

- Symptomatic **Theca leutin cysts** usually regress after evacuation.
- In extreme cases, aspiration is done.
- If torsion lead to extensive infarct, oophrectomy is suggested.

# POST EVALUATION.

- Once evacuation is complete a gentle but thorough curettage is done to remove any remnants
- Intra or post evacuation ultrasound is done to ascertain the completeness of evacuation
- If necessary, a check curettage can be done.
- **All products of conception must be sent for HPE** – to confirm, to rule out neoplasia, presence of fetal parts
- **Anti-D prophylaxis** to mother if Rh-ve

# Complications during evacuation

- Haemorrhage
- Perforation ( as uterus is very soft) – emergency laparotomy needed
- massive DIC / massive pulmonary embolization by molar tissue.

Sudden unexplained collapse during evacuation from acute pulmonary HTN and cardiac failure

# ROLE OF HYSTERECTOMY

- NOT indicated except as prophylaxis for preventing choriocarcinoma in patients in perimenopausal age & who have completed family ;
- But even with hysterectomy, chance of metastasis is always present

# FOLLOW UP

- CRUCIAL part of management
- Helps in early detection of any malignant change and prompt institution of chemotherapy

- Weekly follow up with BhCG till levels become normal (usually within 8 weeks)
- Thereafter monthly testing for 6 months (risk of developing GTN is greatest in the first 6 months)
- If not normal within 8 weeks, follow up till 6 months after the B hcg becomes normal.
- Contraceptive measures are adopted to prevent pregnancy.
- Advised not to conceive till follow up is complete.



- Each visit : **relevant symptoms** – irregular bleeding,persistent cough ,hemoptysis , dyspnea
- **Clinical examination** – uterine size  
ovarian cysts  
vulval & vaginal metastasis  
distant metastasis
- **Ultrasound** if necessary – residual/locally invasive tumor, subinvolution of uterus ,ovarian cysts

# Risk of GTN

- **Complete moles** - 20% progress to GTN

## **Risk factors for postmolar GTN:**

- Advanced maternal age
- High preevacuation BhCG levels >1 lakh mIU/mL
- Uterus large for dates
- Bilateral theca lutein cysts
- Respiratory distress after evacuation
- Eclampsia or Hyperthyroidism
- Uterine subinvolution with post-evacuation bleeding