



2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM

CASE PRESENTATION

MODERATOR: DR JEEVIKA M U

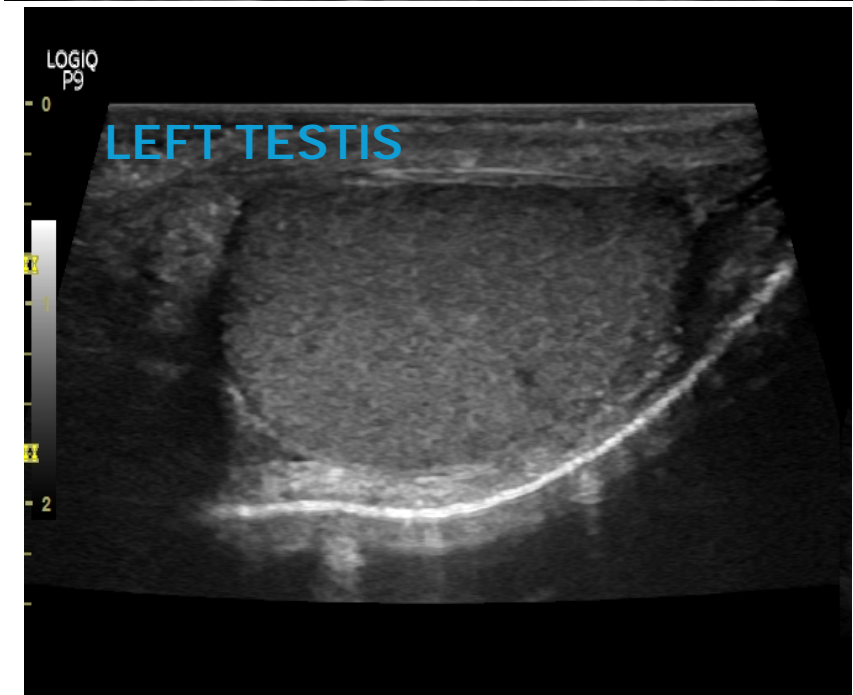
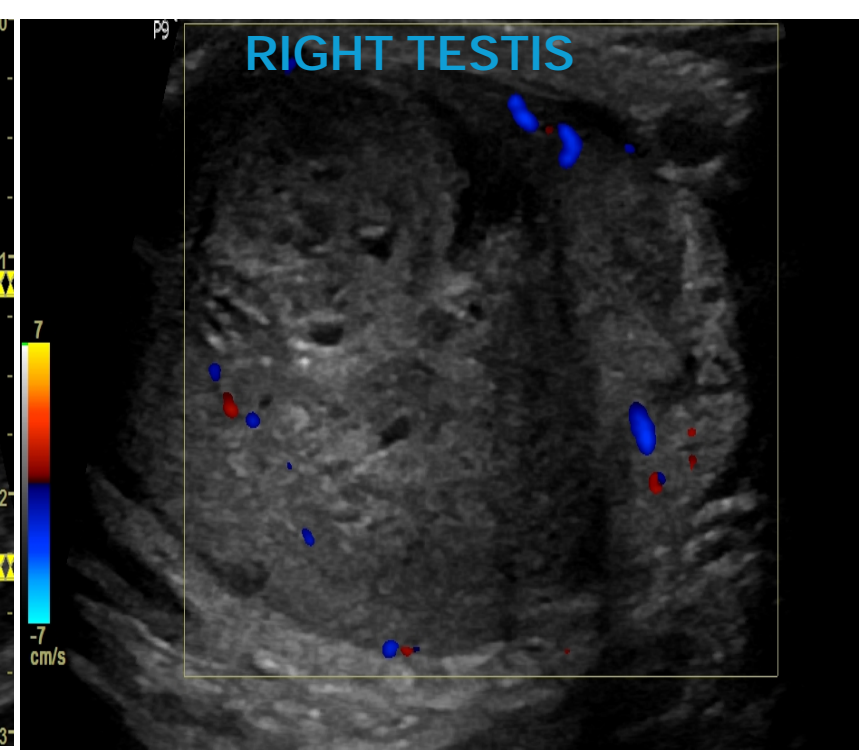
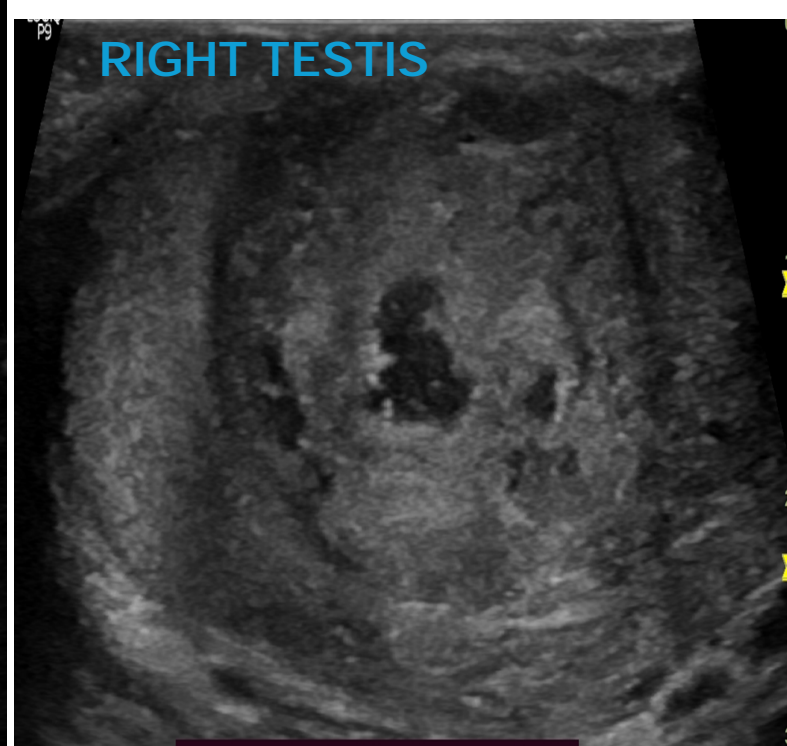
HOD DEPT OF RADIDIAGNOSIS

JJMMC, DAVANGERE

PRESENTER: Dr Vidya, PG Resident

BACKGROUND

- A 24 year male patient presented with c/o Painless swelling in right scrotum since 3 months. Swelling was initially small in size and gradually increased to present size. No history of Pain in scrotum.
- C/O loss of weight and loss of appetite since 1 month.
- C/O cough with expectoration and streaky hemoptysis x 15 days.
- Known Smoker x 2 years
- On Examination: Right scrotum: swelling present. , hard in consistency. Left testis normal on palpation.
- Patient underwent USG inguinoscrotal region, chest radiograph, CECT thorax and Elevated.
- Serum Beta HCG: >1 lakh - Elevated.

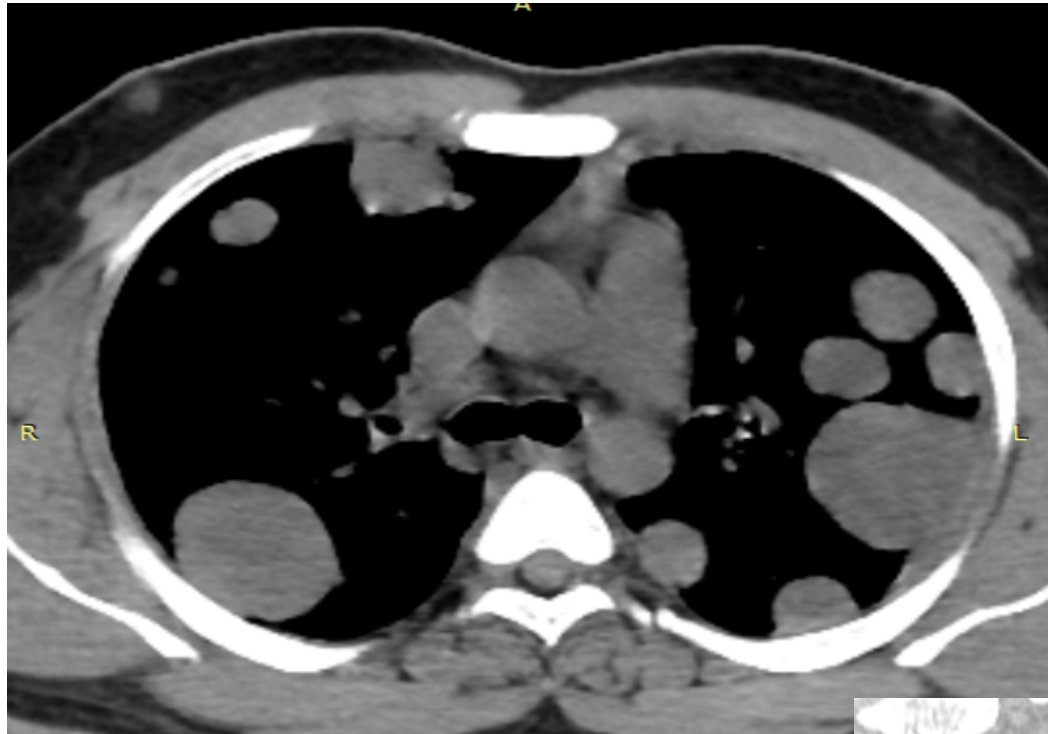


USG INGUINOSCROTUM: Right testis appears enlarged with a well-defined heterogeneous predominantly hyperechoic lesion with few specs of internal calcifications and necrotic areas noted in right testis. The lesion shows peripheral vascularity on colour doppler study



POSTERIO-ANTERIOR CHEST RADIOGRAPH : Multiple rounded, smoothly margined radio-opacities in bilateral lung fields with no zonal predominance- S/O cannon ball metastases → Classical appearance associated with choriocarcinoma

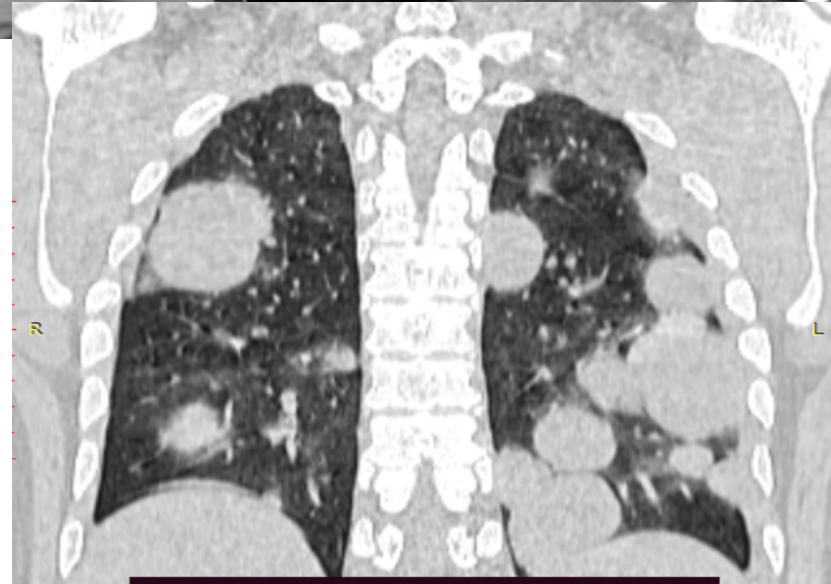
Plain axial section of thorax
mediastinal window



Post contrast axial section of
thorax mediastinal window



CECT THORAX: Multiple randomly distributed heterogeneously enhancing pulmonary nodules with central non enhancing areas in bilateral lungs with few showing feeding vessel sign > s/o Pulmonary Metastasis

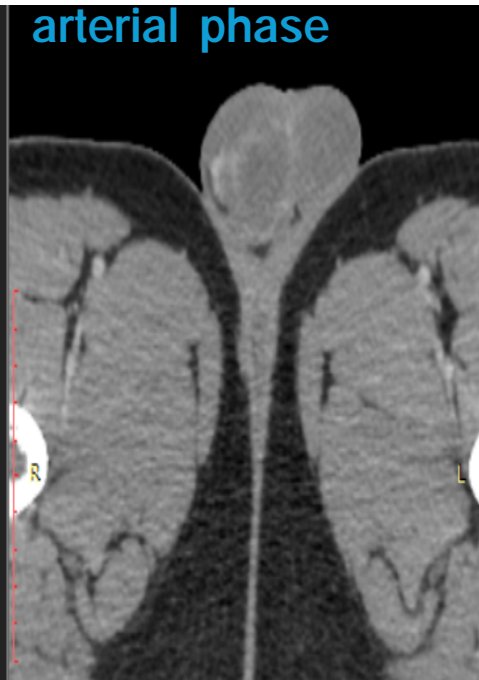


Plain coronal section of
thorax lung window

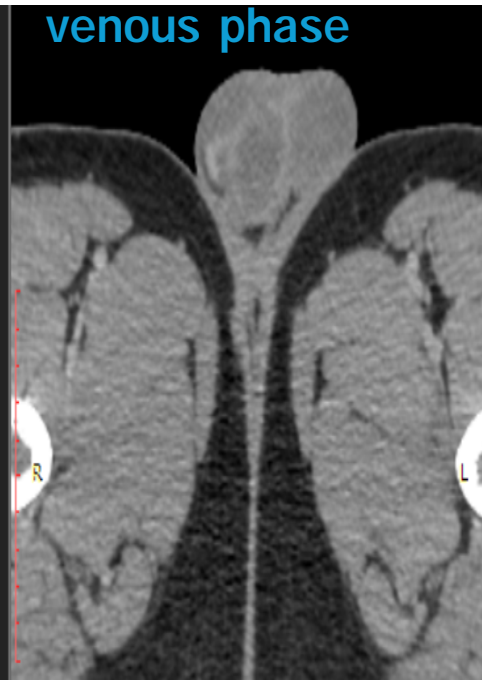
Axial and coronal
non contrast



Axial and coronal
arterial phase



Axial and coronal
venous phase



CECT ABDOMEN:
Relatively well defined
heterogeneous
peripherally enhancing
mass lesion in the right
testis

Follow up

MICROSCOPY: 2257/24, ILLJ-O Section studied show margins- uninvolved by tumour.
A-G : Sections studied show predominately large areas of hemorrhagic infarction of the tumor. Infiltrating tumour composed of atypical, pleomorphic, round to polygonal tumour cells arranged in sheets, nets and focal tubules or glands seen. These cells have hyperchromatic to vesicular nuclei, prominent nucleoli, clear to eosinophilic cytoplasm, high N:C ratio and irregular nuclear contours. The tumour cells show cytotrophoblast and syncytial trophoblast morphology. Mitotic count 4-6 / 10 HPF. Foci of cartilaginous tissue seen. Focal Germ cell neoplasia insitu seen in the adjacent testis.

CAP PROTOCOL

Procedure : Radical Orchiectomy
Specimen laterality : Right
Tumour laterality : Unifocal
Histologic type : **Mixed Germ Cell Tumour**

Chorio carcinoma : 60%

Teratoma : 20%

Seminoma : 10%

Embryonal Carcinoma : 10%

Tumour size : 3x2.5x2.5cm

Tumour extent : tumor invades rete testis

Lymphatic /vascular invasion: Present

Margins status : Spermatic cord - Uninvolved

Regional lymphnodes : Not submitted

pTNM classification (AJCC, 8th edition) : pT2 NxMx.

Pre orchidectomy serum tumour markers : B- HCG elevated , LDH elevated

Additional findings : Germ cell neoplasia insitu

Discussion

Choriocarcinoma of testis

- Common features:
 1. Palpable swelling in scrotum
 2. Elevated Serum Beta HCG levels
 3. At imaging, primary and metastatic masses are hypervascular with central hemorrhagic necrosis. US, the primary testicular mass is solid, hypoechoic, and heterogeneous, with cystic areas from hemorrhage and necrosis. CT and MRI, multifocal metastatic masses are seen, with hypervascularity and hemorrhagic necrosis .
 4. Common metastatic sites at patient presentation include the lungs, liver, gastrointestinal tract, and brain.
 5. Cannonball mets is a radiological term used to describe the appearance of metastases (mets) from choriocarcinoma, particularly in the lungs. The “**cannonball**” appearance is due to the rapid growth and expansion of the tumor, which can cause widespread destruction of surrounding tissue.