KREP

2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM

CASE PRESENTATION

MODERATOR: Dr. Bhagyavathi , Professor , Dept. of radio-diagnosis

Dr. Rahul S, Assistant professor, Dept. of radio-diagnosis

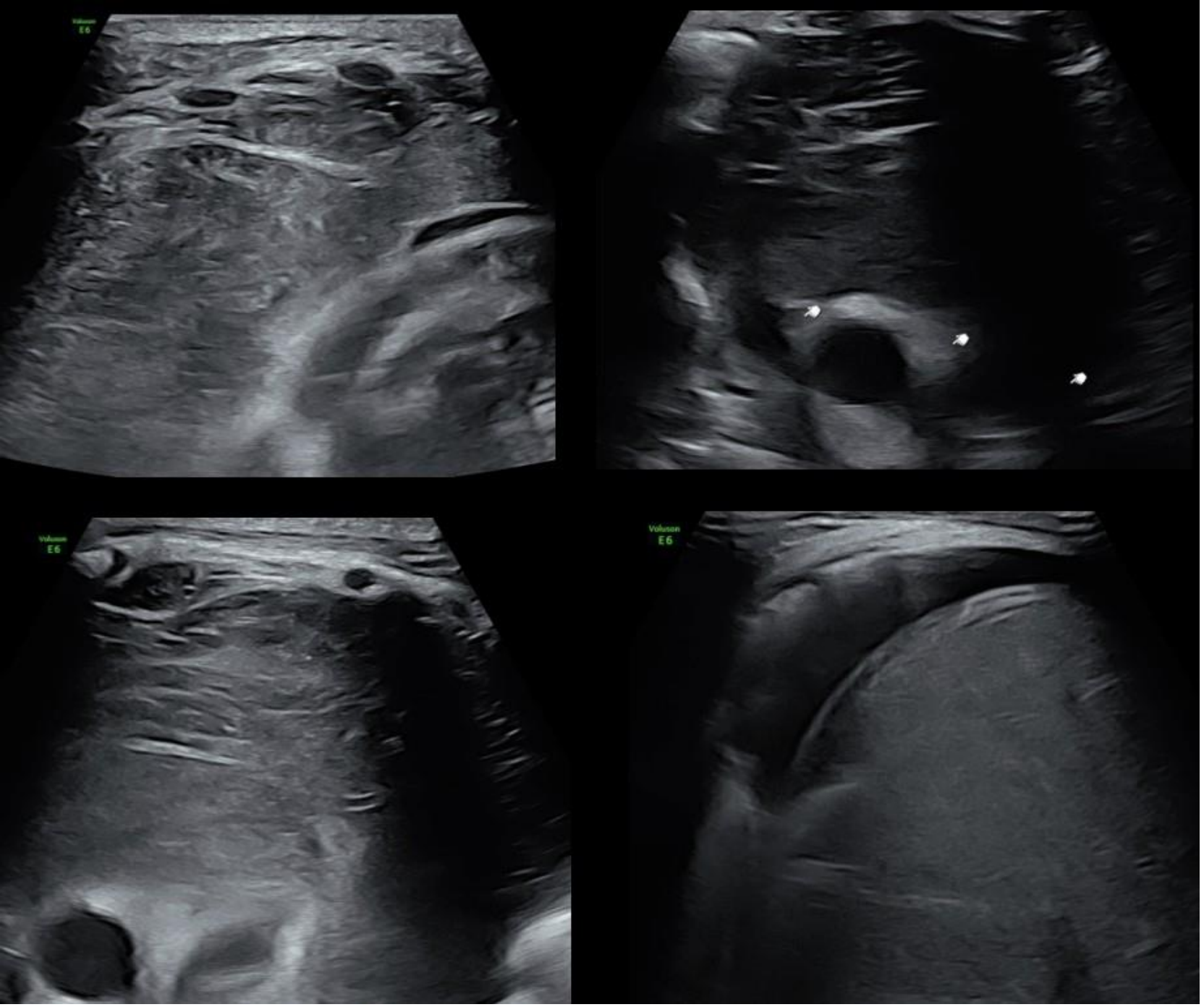
JJMMC DAVANGERE

PRESENTOR:Dr Lavisha Khandelwal, PG resident

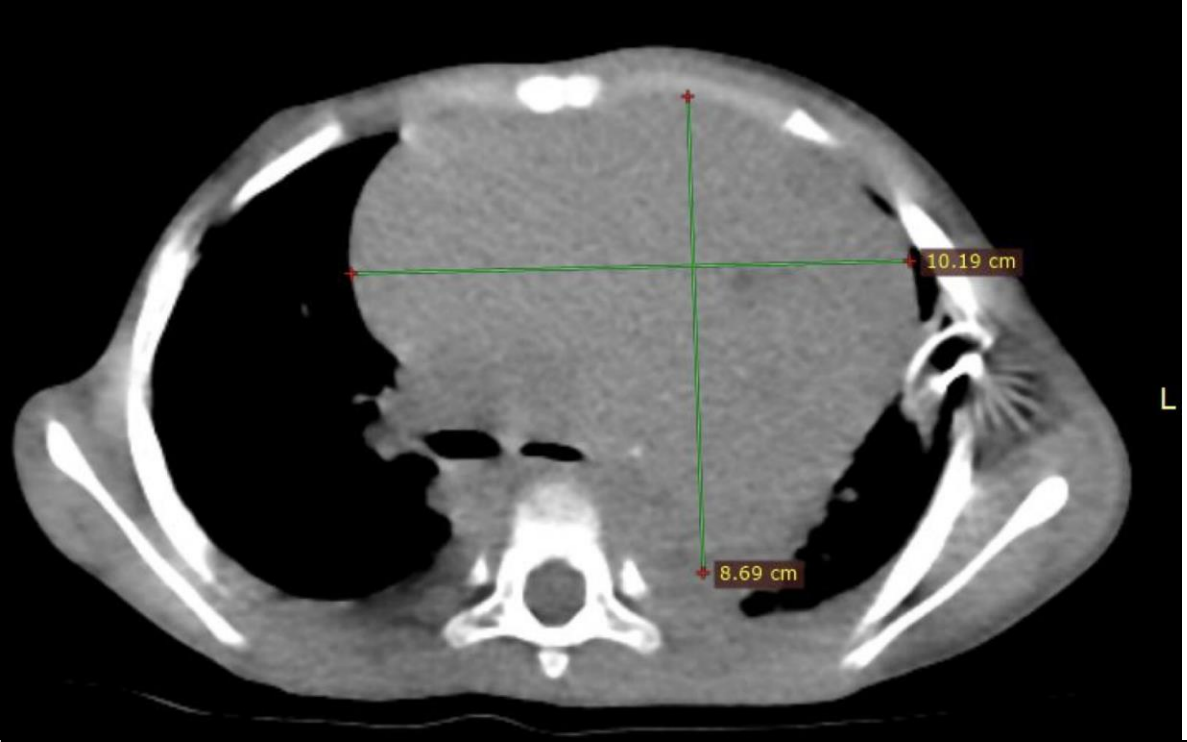
HISTORY

- 4 years old female child came with the complaints of shortness of breath and loss of weight since 1 month
- No h/o fever, cough, cold, blood in sputum, night sweats
- Birth History: Normal
- Developmental History: Normal
- O/E: Decreased chest movement of the left side, decreased air entry on the left side.

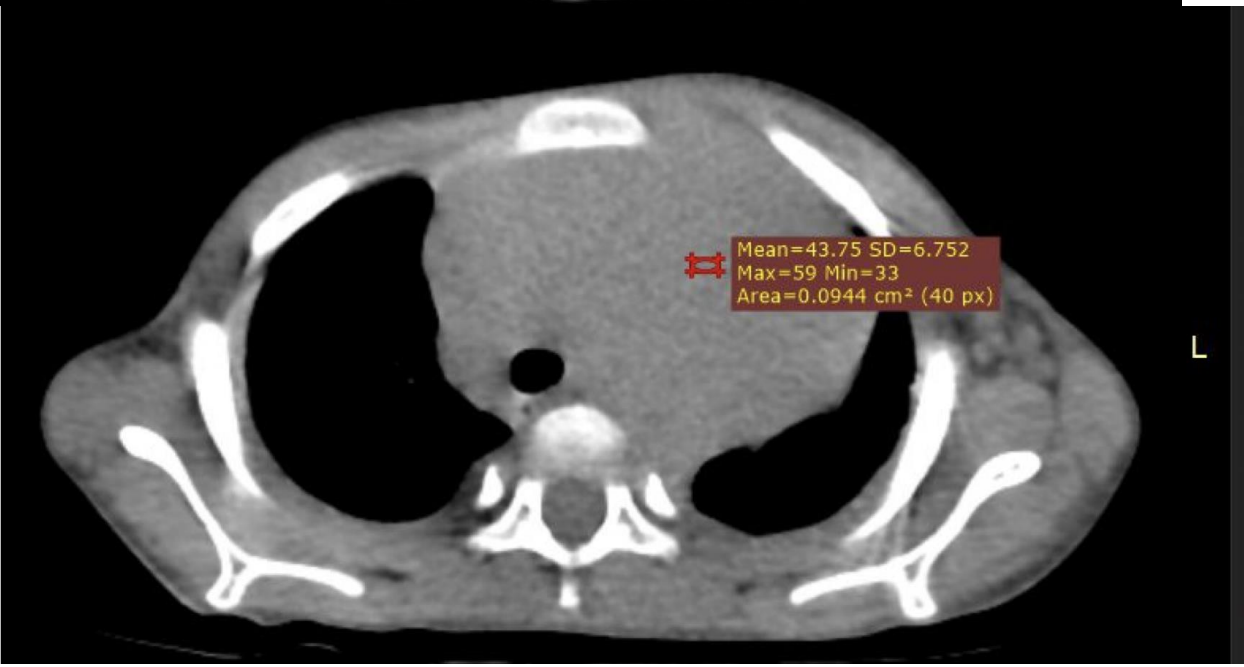
A well-defined lobulated homogenous opacity is seen in the left upper and middle lung zones with signs pointing to an anterior mediastinal origin, including positive hilum overlay, silhouette and cervicothoracic signs. The lesion is seen having a broad base towards mediastinum and medial margins of the lesion are obscured. The lesion is causing mass effect on adjacent structures like the trachea and left main bronchus. No calcification noted within. Lateral view confirms the lesion in the anterior mediastinum, obscuring the retrosternal space. Findings suggest an anterior mediastinal mass, most likely thymic in origin or lymph node mass, with ultrasound recommended to further characterize the lesion.

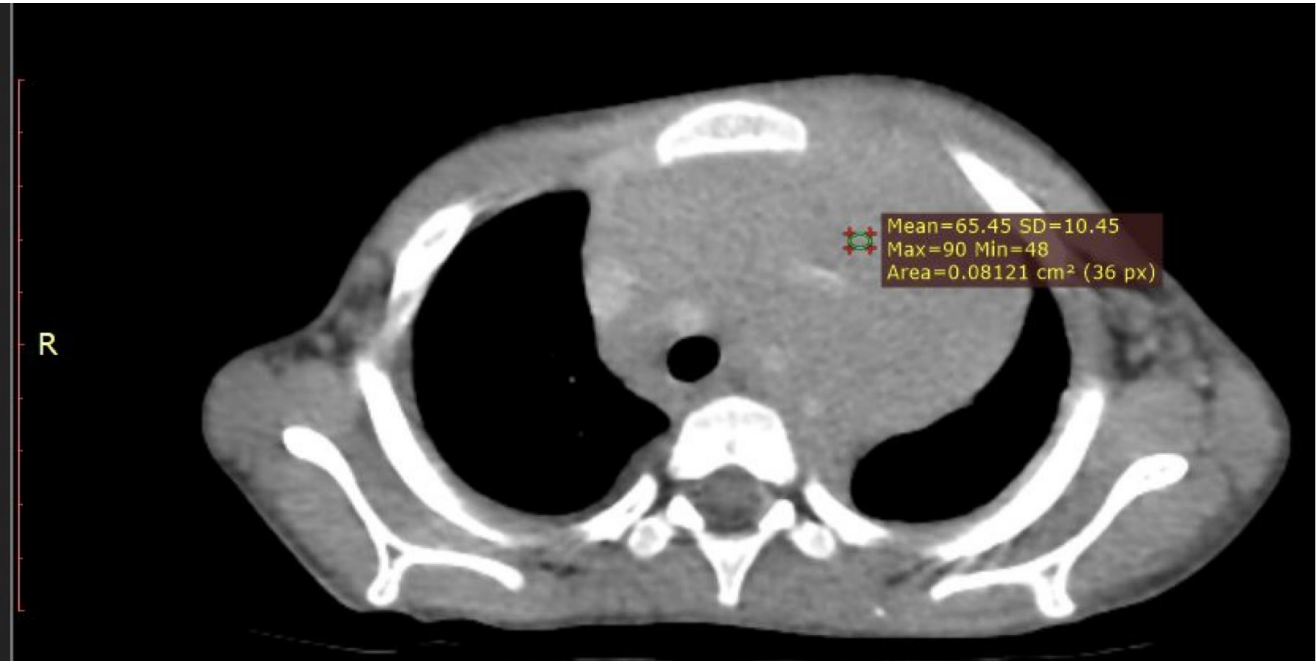


Ultrasound reveals a well-defined, predominantly isoechoic solid anterior mediastinal lesion without cystic areas or calcifications and with minimal internal vascularity. There is no evidence of vascular invasion. mild pericardial and right- sided pleural effusions are present along with pleural thickening.

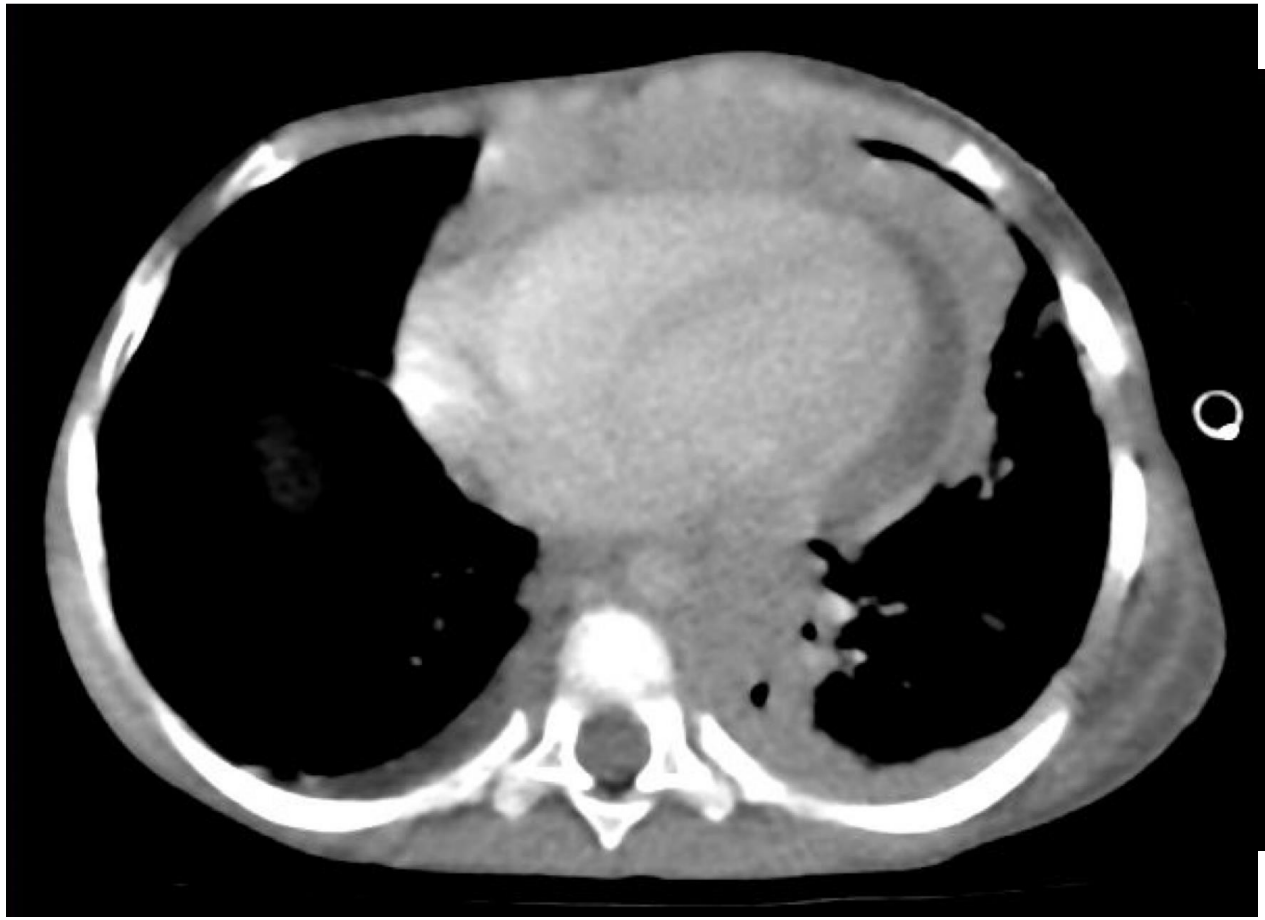


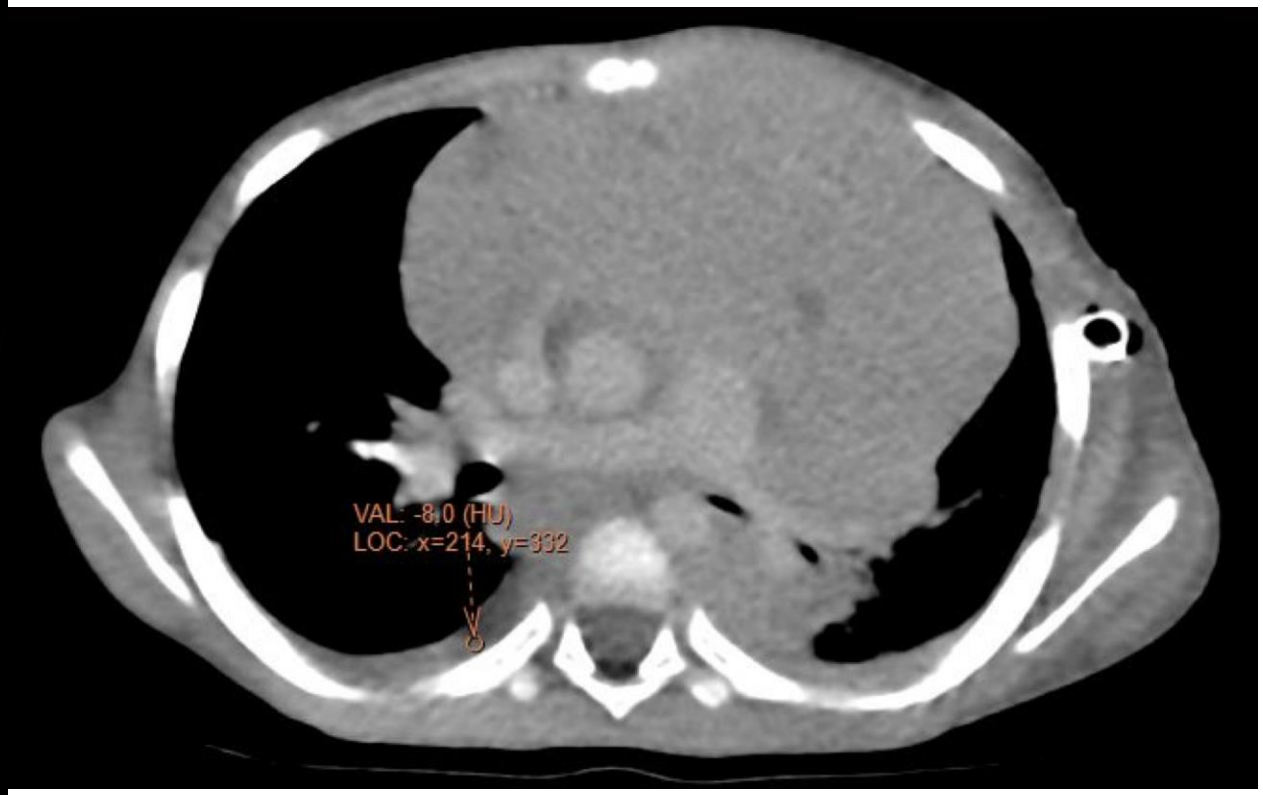
CECT thorax shows a large, well-defined soft tissue mass (11.5×8.0×10.0 cm) centered in the anterior mediastinum. The lesion demonstrates mild homogeneous enhancement on post-contrast imaging.



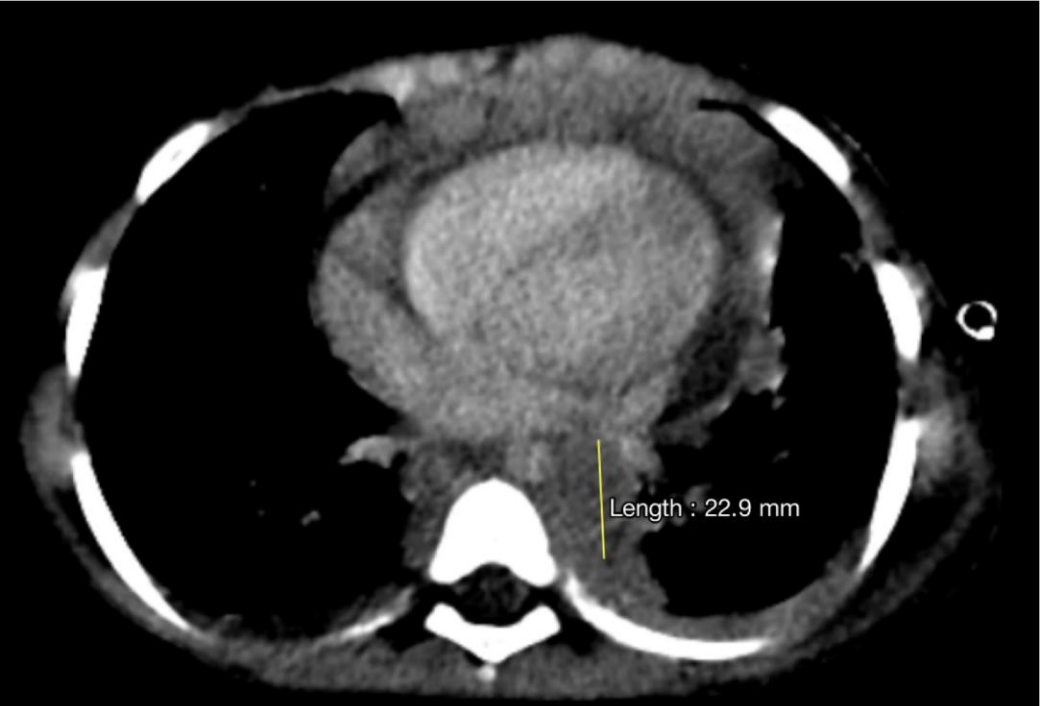


The lesion is seen extending superiorly into the left anterior neck spaces. Inferiorly the lesion is extending till the left hemi-diaphragm.

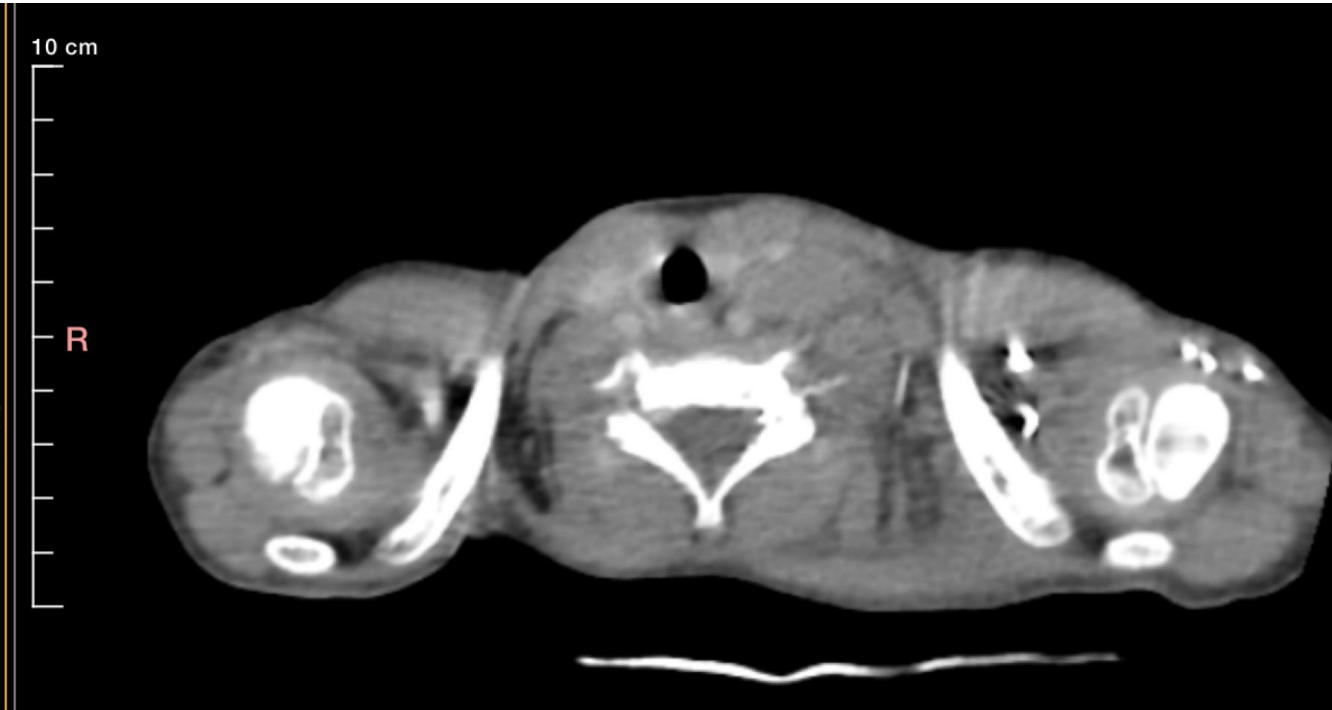


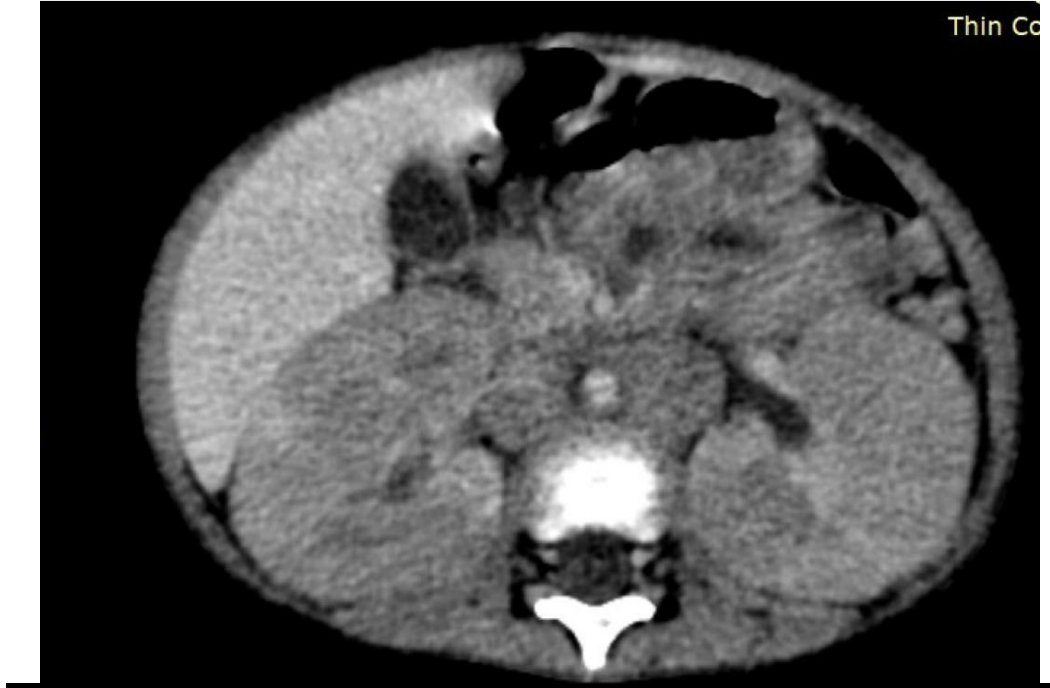


The mass encases the left cardiac border, extends to the left paravertebral region, and is associated with left posterior pleural thickening (~5 mm). Mild pericardial (5 mm) and right pleural effusions (6 mm) are also noted.



Enlarged left paravertebral lymph nodes are seen, with the largest measuring 22.9 × 19.0 mm. Enlarged cervical lymph nodes are also noted in the visualized neck, with the largest measuring 1.3 cm on the left.





Screening of the abdomen revealed an ill-defined focal lesion in the left lobe of the liver. Both kidneys were enlarged with multiple ill-defined heterogeneous focal lesions. Multiple enlarged retroperitoneal lymph nodes were seen, with the largest measuring 1.9 × 1.6 cm.

CONCLUSION

- Large relatively well defined enhancing soft tissue mass lesion epicentred in anterior mediastinum with extension and mass effect as described
- Mediastinal lymphadenopathy
- Right sided mild pleural effusion
- Mild pericardial effusion
- Cervical Lymphadenopathy
- Ill defined focal lesion in the left lobe of liver
- Bilateral enlarged kidneys with multiple ill defined heterogenous focal lesions as described
- Multiple enlarged retroperitoneal lymph nodes

--> F/s/o Mediastinal Neoplastic Etiology - Lymphoma with extra nodal extension

FOLLOW UP

SRI SHANKARA CANCER HOSPITAL AND RESEARCH CENTRE

DEPARTMENT OF LABORATORY SERVICES

Patient Name	: Baby KANEEZ FATHIMA S	**Age/Sex**	: 4 Year(s) / Female
UHID	: SSCF.192362	**Order Date**	: 14/04/2025 11:51
Episode	: IP	**IP/Bed**	: 138208 / 405-2
Ref. Doctor	: Dr. ANAND K C	**Mobile No**	: 9916857667
		DOB	: 07/04/2021
Address	: C/O MOHAMMED IRFAN BASHA # 1886/10,10TH WARD ,ANJANEYA BADAWANE ,HARAP , Vijayanagar, Bangalore, Karnataka, 560040	**Facility**	: Sri Shankara Cancer Foundation

CD56	Dim positive, Trace
CD13	Negative, -
CD15	Negative, -
CD33	Negative, -
CD14	Negative, -
CD64	Negative, -
HLA-DR	Negative, -
CD5	Positive, +
CD1a	Positive, +
Others	CD 48- Positive in subset, CD 99- Dim Positive
IMPRESSION	Corelating with scatter parameters and antigen expression data features are consistent with involvement of pleural fluid with T lymphoblastic lymphoma.
NOTE:	Please correlate with primary tissue biopsy/IHC. Also advised correlation with cytogenetics and molecular studies.
COMMENTS	Informed to Dr Anand by Dr. Gayathri @ 4pm
Processed by	Boopathy.S(30193)

**RUO antibodies used*

End of Report

Dr.GAYATHRI J

Dr.Jayashree D Kulkarni

FEATURE	HODGKIN LYMPHOMA	NON-HODGKIN LYMPHOMA
Age Group	Peaks in adolescence and young adults	Can occur at any age including children
Onset	Gradual	Rapid aggressive onset
B Symptoms (Fever, weight loss and night sweats)	Common in advanced disease	Common often present at the time of diagnosis
Lymph Node Involvement	Often localised, contiguous spread	Multiple, non-contiguous spread
Mediastinal Mass	Common especially in nodular sclerosing type	Possible especially in lymphoblastic lymphoma type
Extranodal disease	Rare	Common (GIT, skin, CNS, bone marrow, liver, lungs, kidneys)
Calcification	May be seen especially after treatment	Rare
Associated pleural/pericardial effusion	Rare	More common
Histology landmark	Reed Sternberg cells present	Absent
Treatment	ABVD regimen (Adriamycin, Bleomycin, Vinblastine and Dacarbazine)	CHOP regimen (Cyclophosphamide, Hydroxydaunorubicin, Oncovin and Prednisone

LIPOMA	• Encapsulated homogenous fat attenuation
LIPOSARCOMA	• Inhomogeneous fat attenuation • Locally aggressive • Irregular areas of soft tissue appearance
THYMIC CYST	• Unilocular/multi-locular well defined fluid attenuation mass
THYMIC HYPERPLASIA	• Enlargement of the thymus which remains normally organised • Similar MRI signals to those of normal thymus due to microscopic fat content which leads to a drop in signal intensity in opposed phases in images in contrast to the in phase images
THYMOMA	• Soft tissue attenuation • Mild to moderate contrast enhancement • Occasionally contains cystic, necrotic areas and calcifications
THYMIC CARCINOMA	• Ill defined soft tissue mass • Necrotic and cystic component common • Heterogenous contrast enhancement • Lymphadenopathy and great vessel invasion seen • 50-60% distant metastasis present at the time of presentation • Pleural nodules
LYMPHOMA	• Homogenous soft tissue mass • Mild to moderate contrast enhancement • Absence of vascular involvement • Mediastinal Lymphadenopathy • Pleural/Pericardial effusion common
MEDIASTINAL GOITRE	• Inhomogeneous density with cystic areas and calcifications • Marked contrast enhancement
TERATOMA	• Well defined unilocular/multilocular cystic lesion containing fluid, soft tissue and fat • Calcifications present

THANK YOU!