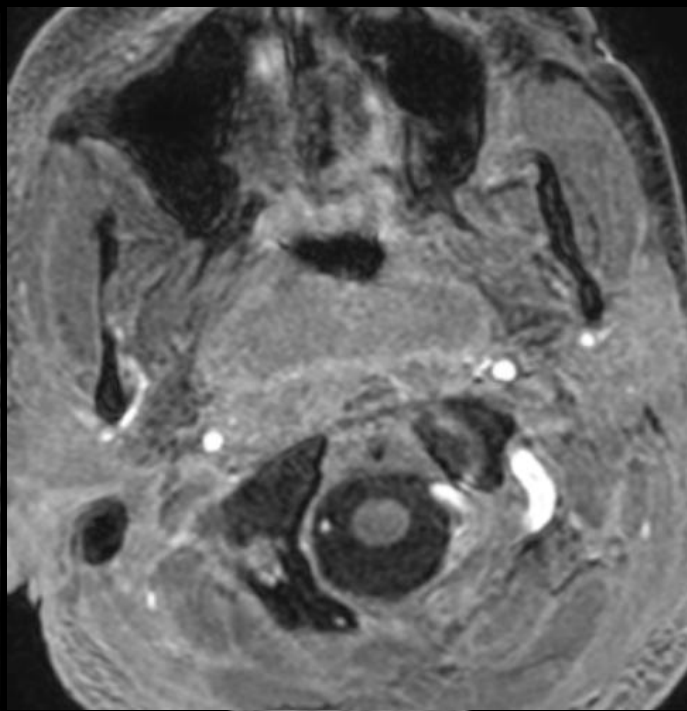
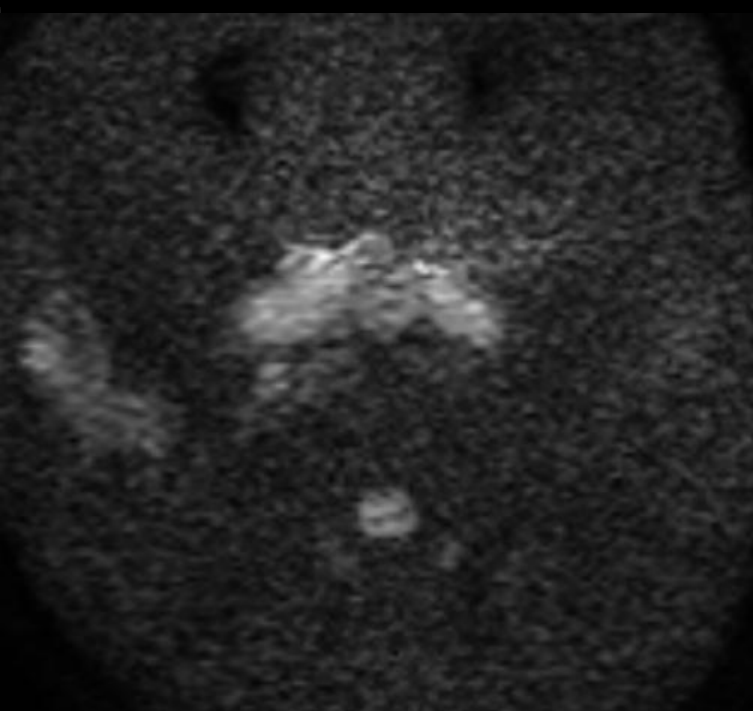




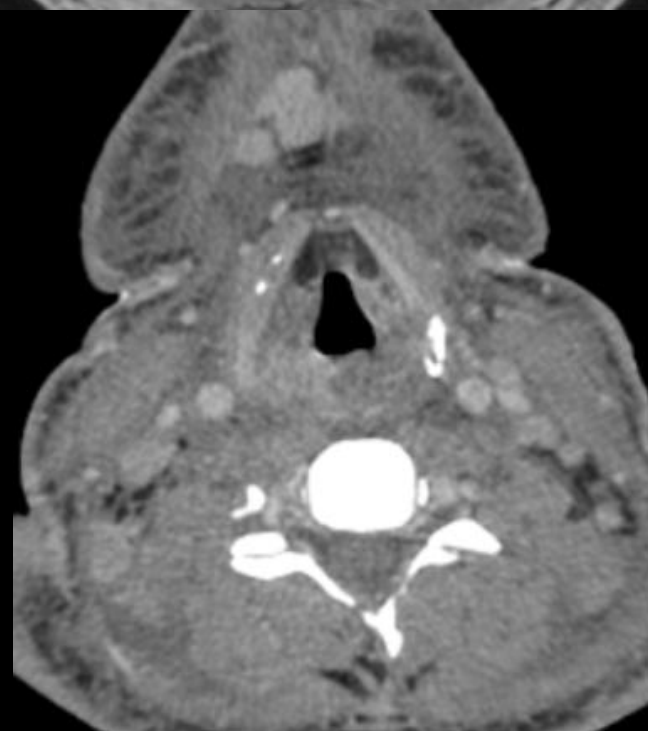
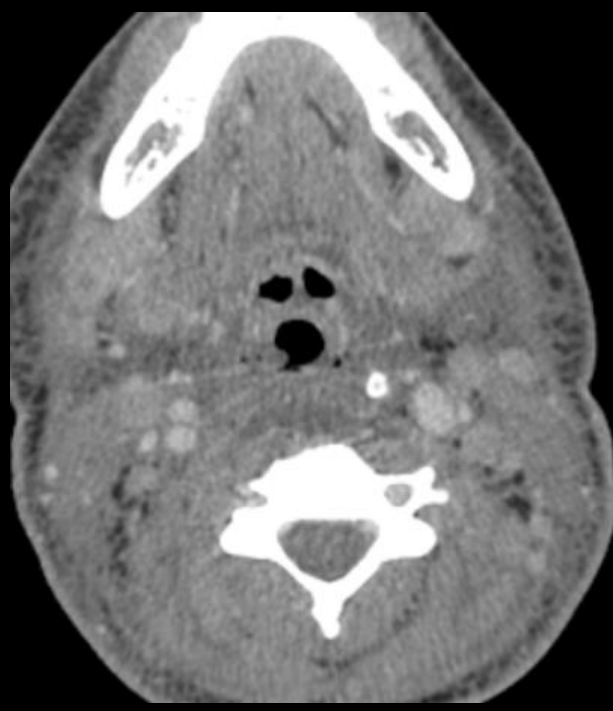
2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM

SJMCH, Bengaluru
Contributor of the Series



Diagnosis?



- MRI images showing homogeneous soft confined to nasopharynx showing T2 FLAIR hyperintense signal with homogeneous diffusion restriction and hypoenhancement.
- Corresponding CT images show homogeneous mildly enhancing soft tissue in the nasopharynx. There are multiple mildly enlarged cervical lymph nodes in the submental, anterior and posterior cervical spaces. Mild diffuse anasarca is noted. No evidence of bone erosion.
 - **Findings favour the possibility of lymphoproliferative disorder over nasopharyngeal carcinoma (in view of diffuse cervical lymphadenopathy)**

Nasopharyngeal lymphoma

1. Pathology & Epidemiology:

- Represents **primary extranodal non-Hodgkin lymphoma** of the nasopharynx, usually **diffuse large B-cell (DLBCL)** or **NK/T-cell type** (EBV-associated, common in Asia and Latin America).
- Occurs in **middle-aged to older adults**, occasionally immunocompromised patients.

2. Clinical Presentation:

- Presents with **nasal obstruction, epistaxis, neck lymphadenopathy, or constitutional "B" symptoms** (fever, weight loss, night sweats).
- Unlike nasopharyngeal carcinoma (NPC), **cranial nerve palsies and otitis media** are less frequent.

3. CT Features:

- Appears as a **homogeneous soft-tissue mass** in the **nasopharynx**, often **centered at the posterior wall**.
- **Molds to surrounding structures without bone destruction**, distinguishing it from NPC.
- Moderate, uniform post-contrast enhancement.

4. MRI Characteristics:

- **T1:** Iso- to mildly hypointense to muscle; **T2:** mild-to-moderate hyperintensity.
- **Post-contrast:** Homogeneous enhancement with **sharp or slightly lobulated margins**.
- Shows **marked diffusion restriction** due to high cellularity — a key differentiator from inflammatory tissue or NPC.

5. Patterns of Spread:

- May extend into **nasal cavity, parapharyngeal space, or oropharynx**; bony invasion is rare even in bulky disease.
- **Cervical lymphadenopathy** is common but typically non-necrotic.
- NK/T-cell subtype may show **ulceration or necrosis** due to angioinvasive behavior.

6. Oncoradiologic Implications:

- Imaging helps differentiate from **NPC (more irregular, destructive)** and **nasopharyngeal inflammation (less diffusion restriction)**.
- PET/CT is essential for **staging and response assessment**; therapy is **non-surgical** (chemotherapy $\pm$ radiotherapy).
- Reporting should emphasize **extent, marrow involvement, nodal burden, and skull-base integrity** for accurate staging.

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