



2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM

SJMCH, Bengaluru
Contributor of the Series

Known case of nasopharyngeal cancer.

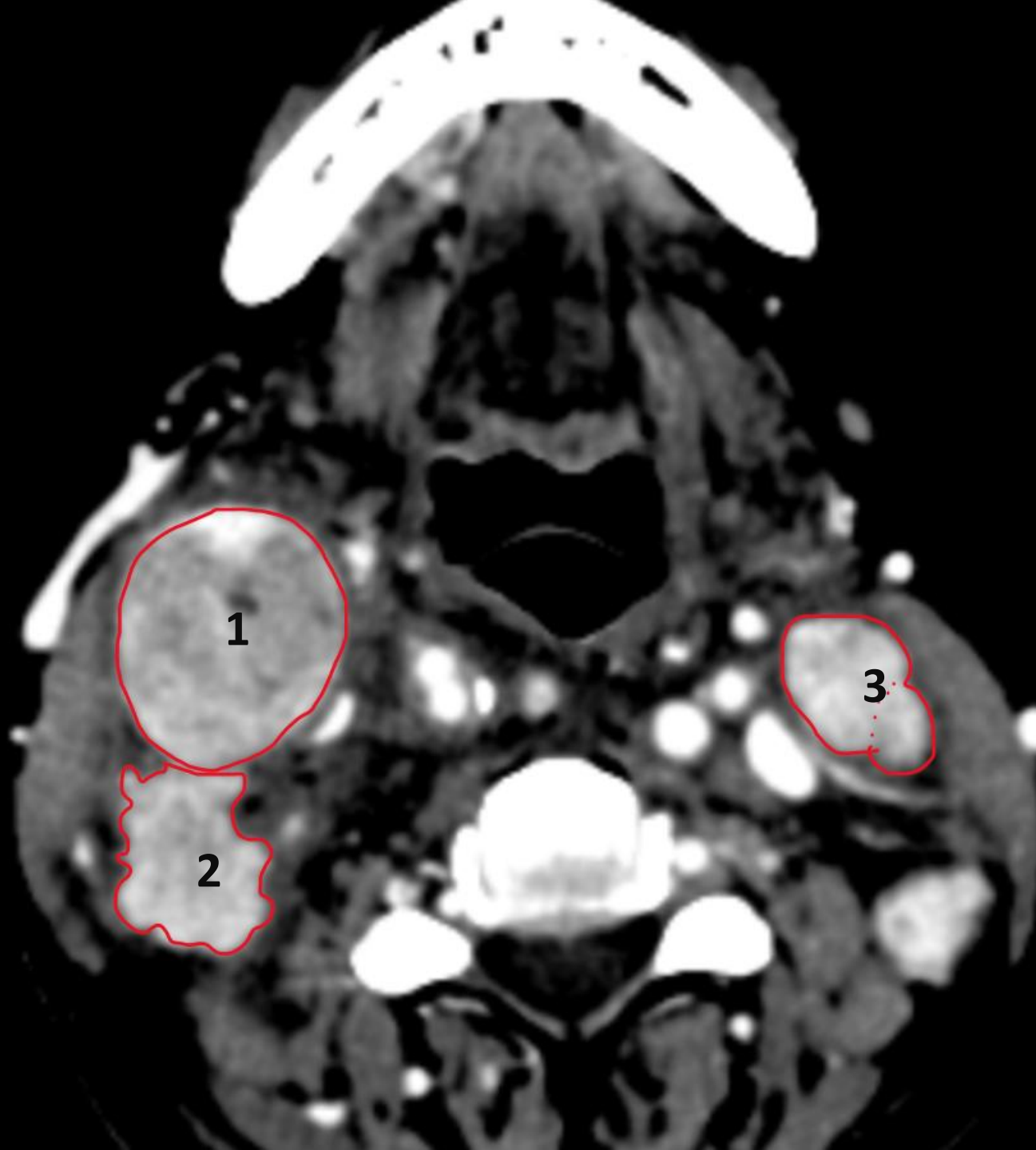
What is the N stage?



1. Enlarged node with regular smooth margins
2. Enlarged node with irregular margins.
3. Enlarged coalescing / conglomerating lymph node.

All are less than 6 cm.
But, in view of iENE, it is
N3 for nasopharyngeal
carcinoma / p16+
oropharyngeal squamous
cell carcinoma (OPSCC).

N3b for p16- OPSCC



Imaging-detected extranodal extension (iENE) on appropriate morphological imaging refers to unequivocal radiologic signs of tumour invasion through the capsule of a lymph node into either perinodal fat or adjacent tissues (e.g., skin, muscle, or neurovascular structures), or a **coalescent nodal mass**, which comprises ≥ 2 adjacent lymph nodes with loss of their intervening tissue planes and capsules to merge into a single indivisible structure.

- 1- Enlarged node.
- 2- Enlarged but irregular – therefore iENE.
- 3- Enlarged and coalescing – loss of capsule and has become single indivisible structure.

- N stage for nasopharyngeal carcinoma 2025 update.
- iENE (any size) = N3

N – Regional Nodes

- cNX Regional lymph nodes cannot be assessed
- cN0 No regional lymph node metastasis
- cN1 Unilateral metastasis in cervical lymph node(s), and/or unilateral or bilateral metastasis in retropharyngeal lymph nodes, and 6 cm or less in greatest dimension, and above the caudal border of cricoid cartilage, and without advanced clinical/radiological extranodal extension*
- cN2 Bilateral metastasis in cervical lymph nodes, and 6 cm or less in greatest dimension, and above the caudal border of cricoid cartilage, and without advanced clinical/radiological extranodal extension*
- cN3 Metastasis in cervical lymph node(s) greater than 6 cm in greatest dimension
or
Extension below the caudal border of cricoid cartilage
or
Advanced clinical/radiological extranodal extension*

Notes

* Advanced radiological and/or clinical extranodal extension is unequivocal evidence of tumour invasion into adjacent structures (i.e., skin, muscle, salivary gland and/or neurovascular bundles) identified by appropriate morphological imaging or clinical examination.
Midline nodes are considered ipsilateral nodes.

iENE

- Core Imaging Features (CT/MRI): Irregular or spiculated nodal margins, Perinodal fat stranding or obliteration, Infiltration of adjacent muscles, vessels, or skin, Loss of nodal capsule sharpness and asymmetric enhancement.
- Presence of iENE is associated with worse locoregional control, distant metastasis, and reduced overall survival across HNSCC, NPC, and HPV-negative oropharyngeal carcinoma.
- Reporting Best Practice: Explicitly state presence / absence / suspicion of iENE, Describe extent (focal vs gross, involved compartments), Note adjacent structure invasion, Use standardized lexicon (e.g., iENE-definite/probable/indeterminate) to enhance multidisciplinary reproducibility.
- Staging charts can be referred for exact staging. Understanding basic Imaging biomarkers is more important and memorizing the stage.

Contributor

Dr. M S Kashif
MD, Fellowship in Oncoimaging
SR, St. John's Medical College Bengaluru