

ARRO Contour:
SUPRAGLOTTIC LARYNX
CARCINOMA
(POST TRACHEOSTOMY)

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CONTOURING STEPS-RTOG 1016

- Co-registration and fusion of contrast enhanced planning CT with PET-CT images when available.
- **GTV** = Gross primary tumor and nodal disease as visualized on planning CT (and co-registered PET image).
- **CTV1** = 0.5 - 1.0 cm expansion on GTV
- **CTV2** = High-risk sub-clinical disease sites such as anatomical compartments containing PTV1 and first echelon nodes which are not clinically or radiologically involved.
- **CTV3** = Low-risk targets such as neck nodal levels which are not first echelon nodes and not adjacent to levels containing grossly involved nodes.

DOSE PRESCRIPTION-RTOG 1016

- **CTV1** = 70 Gy/ 35 fractions @ 2 Gy/ fr
- **CTV2** = 56 Gy/ 35 fractions @ 1.6 Gy/ fr
- **CTV3** = 50- 52.5 Gy/ 35 fr @ 1.43 - 1.5 Gy/ fr
- If a separate low-neck portal is planned, then isocentric matching preferred. Dose planned @ 2 Gy/ fr prescribed to 3 cm AP field (with laryngeal/ cord block), to a total dose of 44 Gy/ 22 fr followed by boost to 60 Gy/ 30 fr total for involved low-neck nodes with complete spinal blocks.
- PTV expansions per institutional protocols.

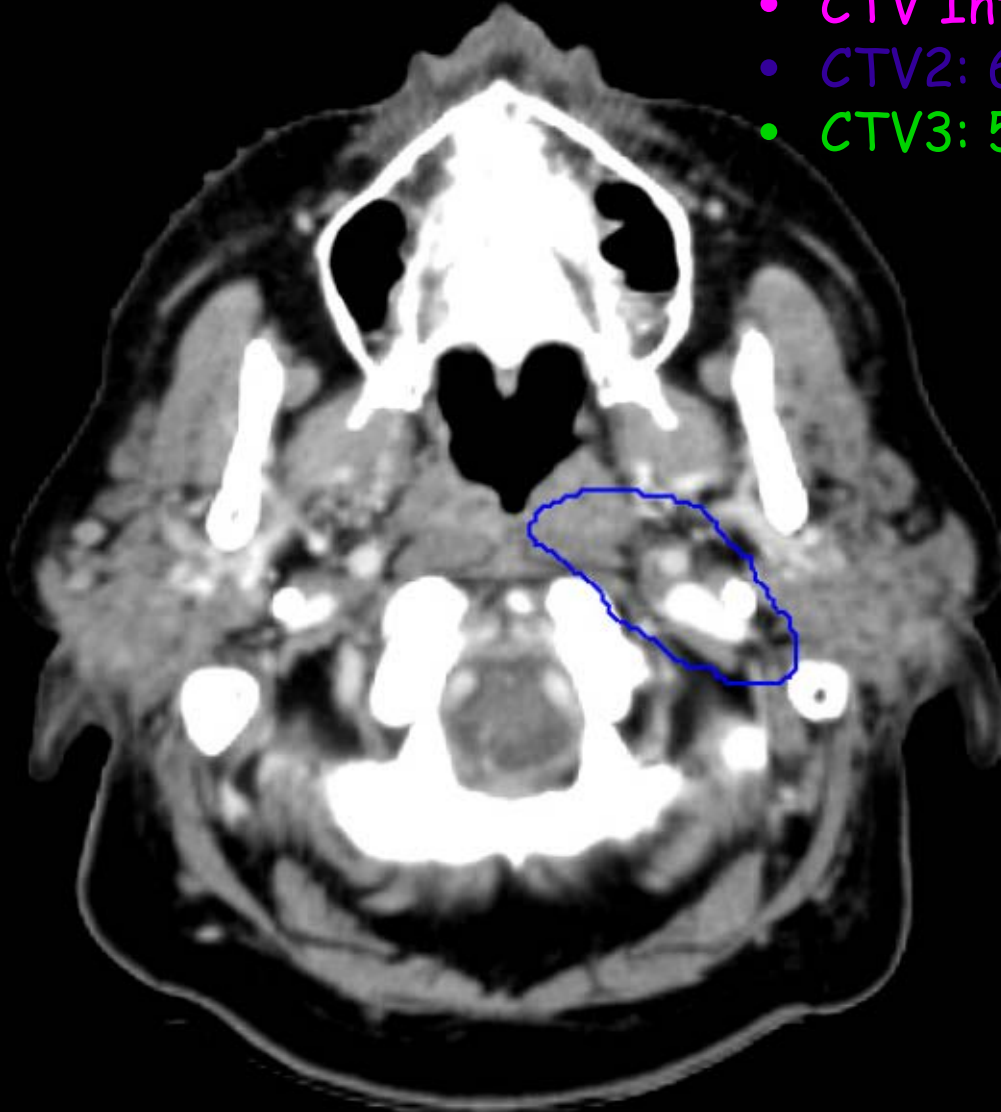
CONTOURING STEPS-University of Wisconsin

- Co-registration and fusion of contrast enhanced planning CT with PET-CT images when available.
- **GTV** = Gross primary tumor and nodal disease as visualized on planning CT (and co-registered PET image).
- **CTV Intermediate** = High-risk volume around GTV primary drawn in this particular case due to uncertainty of tumor delineation (please refer to clinical history in ARROCase)
- **CTV2** = High-risk sub-clinical disease sites such as anatomical compartments containing PTV1 and first echelon nodes which are not clinically or radiologically involved.
- **CTV3** = Low-risk targets such as neck nodal levels which are not first echelon nodes and not adjacent to levels containing grossly involved nodes.

CONTOURING STEPS-University of Wisconsin

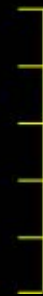
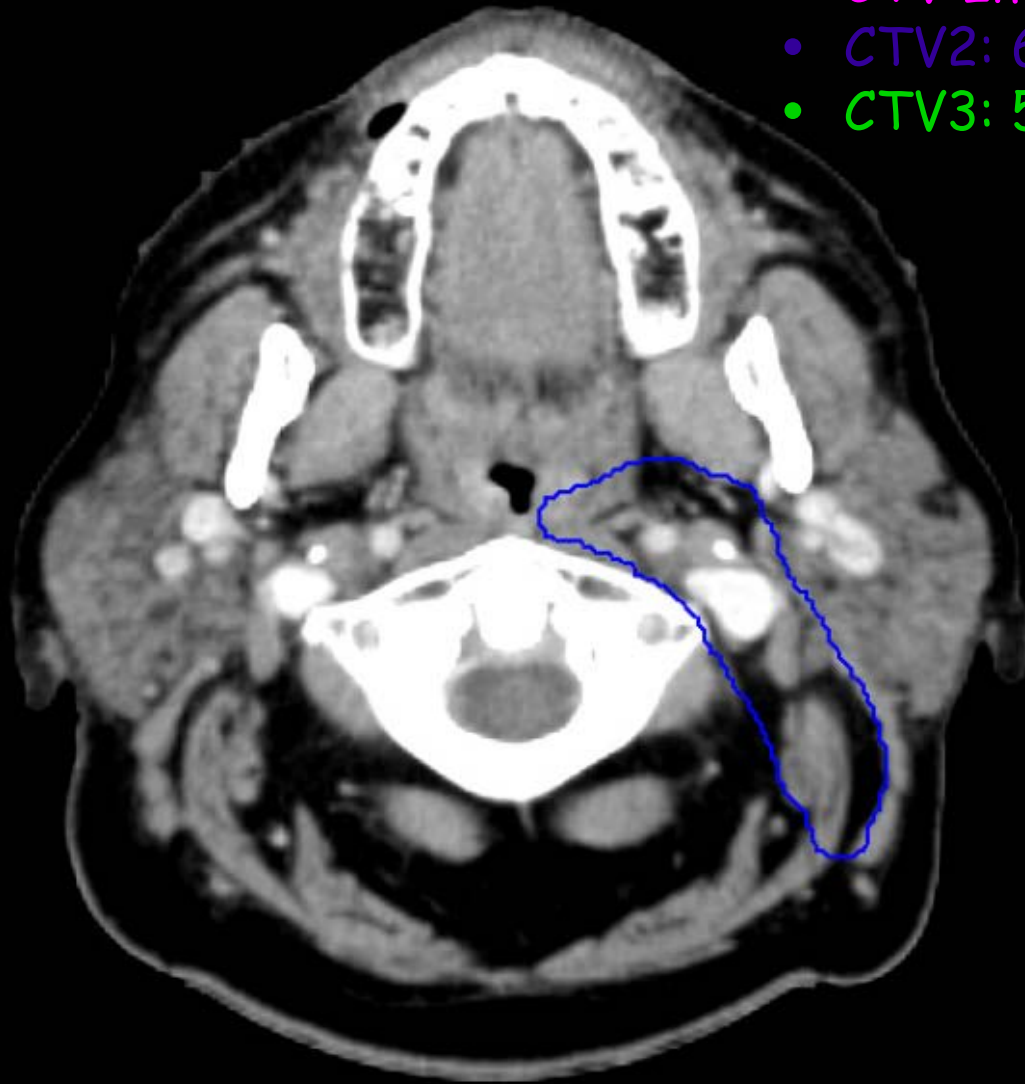
- **GTV** = 70 Gy/ 33 fractions @ 2.12 Gy/ fr
- **CTV Intermediate** = 63 Gy/ 33 fractions @ 1.91 Gy/fr
- **CTV2** = 60 Gy/ 33 fractions @ 1.6 Gy/ fr
- **CTV3** = 54- 56 Gy/ 33 fr @ 1.64 - 1.7 Gy/ fr
- PTV expansions per institutional protocols.

- GTV: 70 Gy
- CTV Intermediate: 63 Gy
- CTV2: 60 Gy
- CTV3: 54 Gy

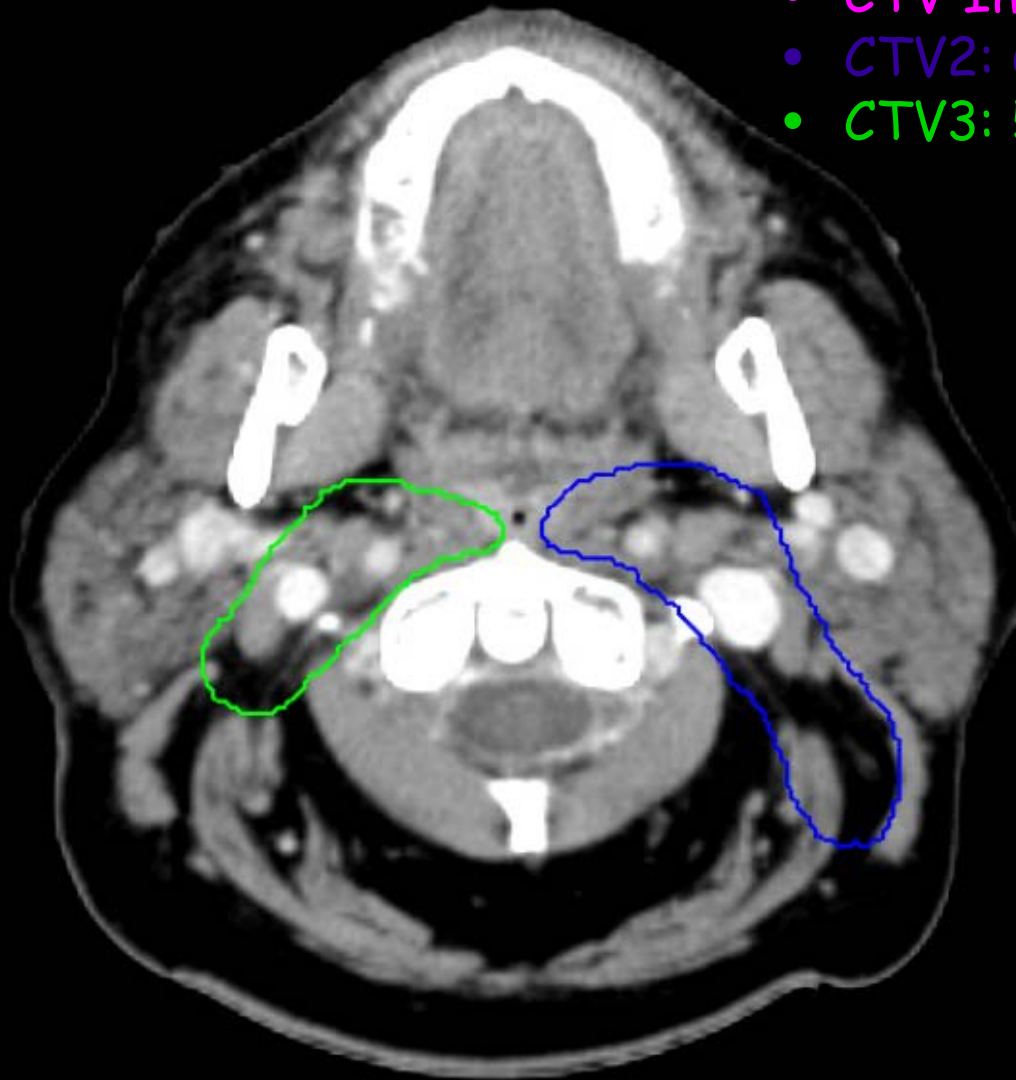


Note: In presence of gross level II node, ipsilateral level II contoured till base skull, including retropharyngeal nodes.

- GTV: 70 Gy
- CTV Intermediate: 63 Gy
- CTV2: 60 Gy
- CTV3: 54 Gy

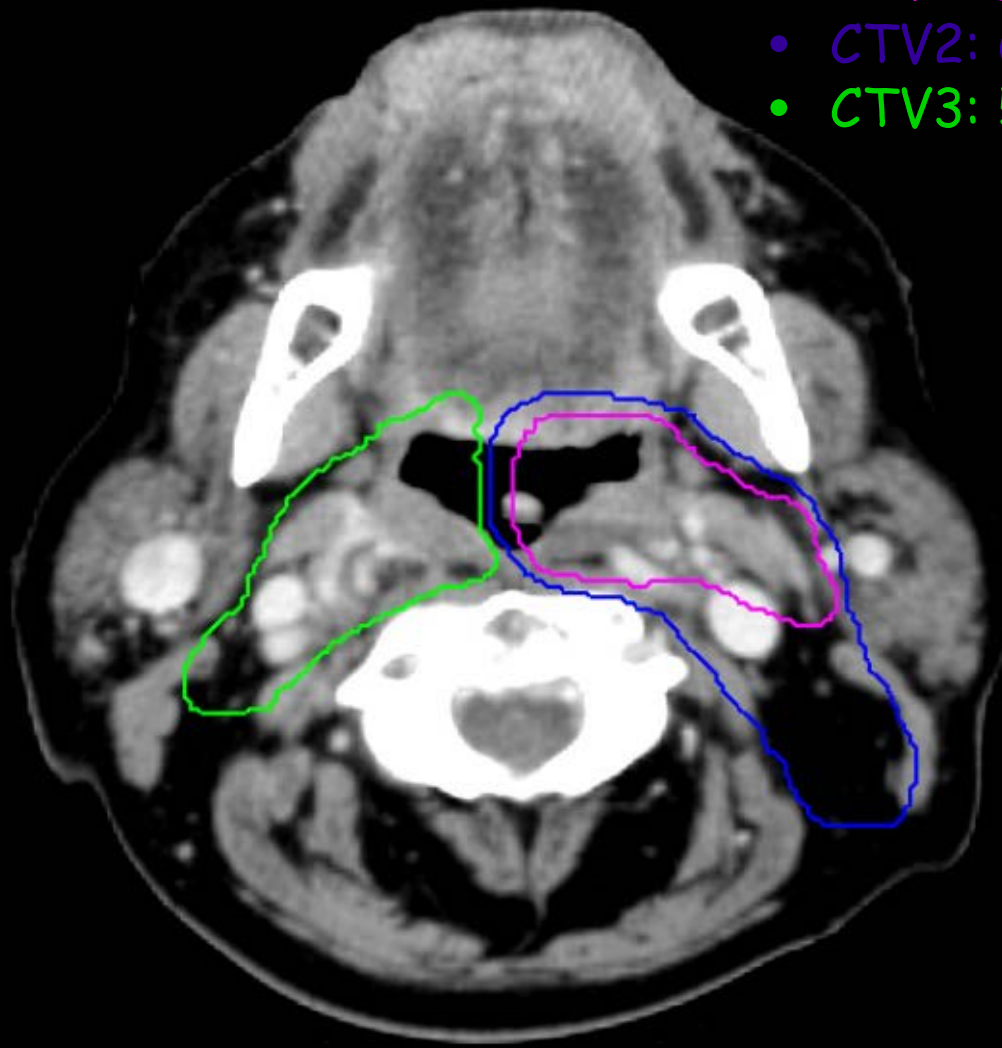


- GTV: 70 Gy
- CTV Intermediate: 63 Gy
- CTV2: 60 Gy
- CTV3: 54 Gy



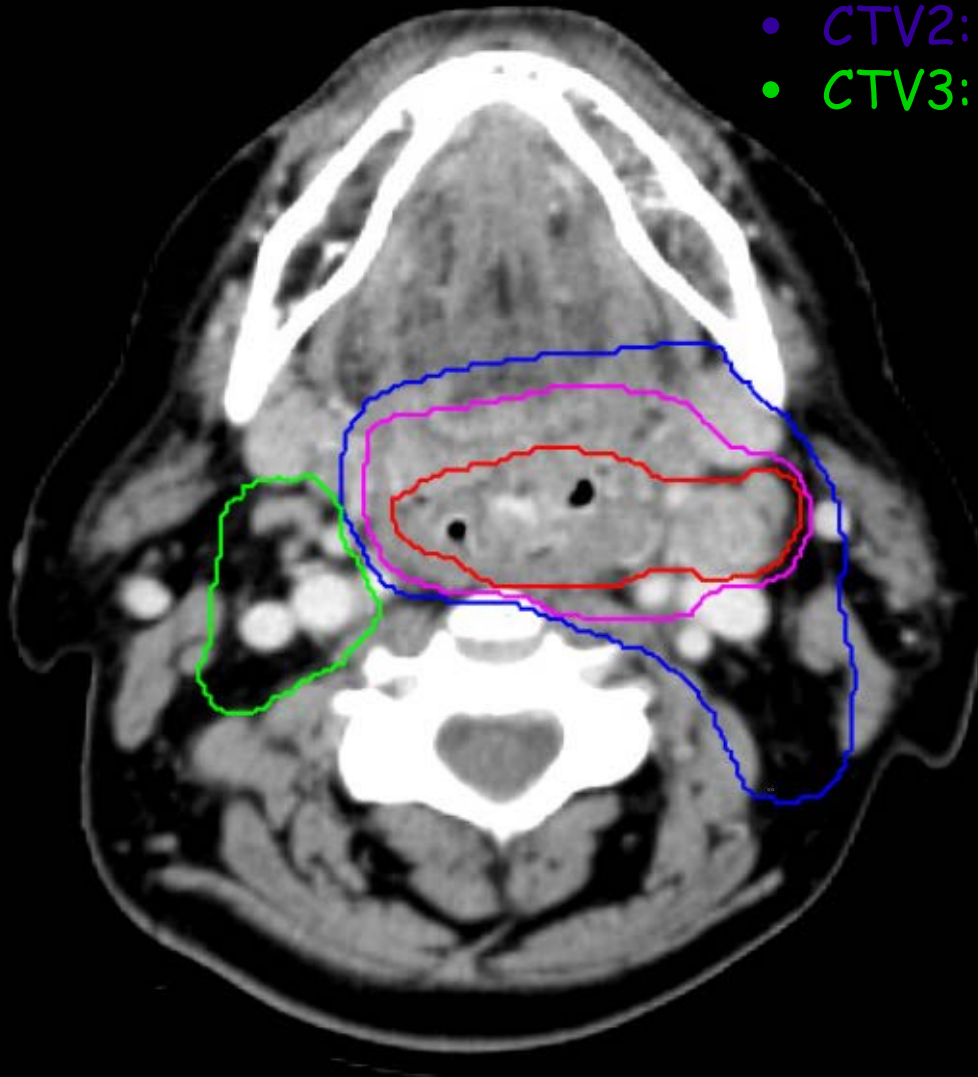
Note: Contralateral level II contoured below C1 to help with contralateral parotid sparing.

- GTV: 70 Gy
- CTV Intermediate: 63 Gy
- CTV2: 60 Gy
- CTV3: 54 Gy

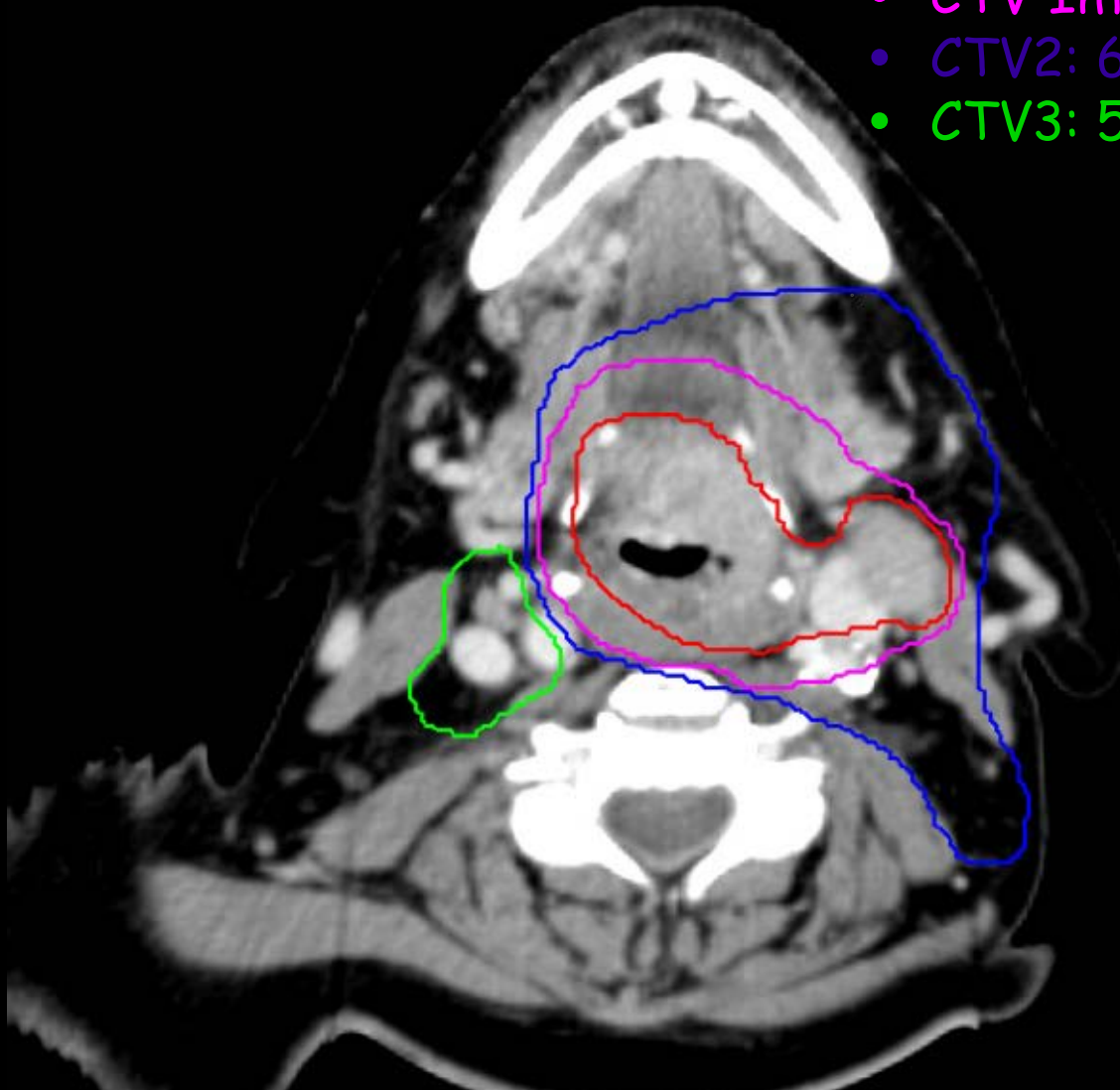


Note: Inclusion of contralateral level IIB and bilateral level V decided on a case to case basis.

- GTV: 70 Gy
- CTV Intermediate: 63 Gy
- CTV2: 60 Gy
- CTV3: 54 Gy



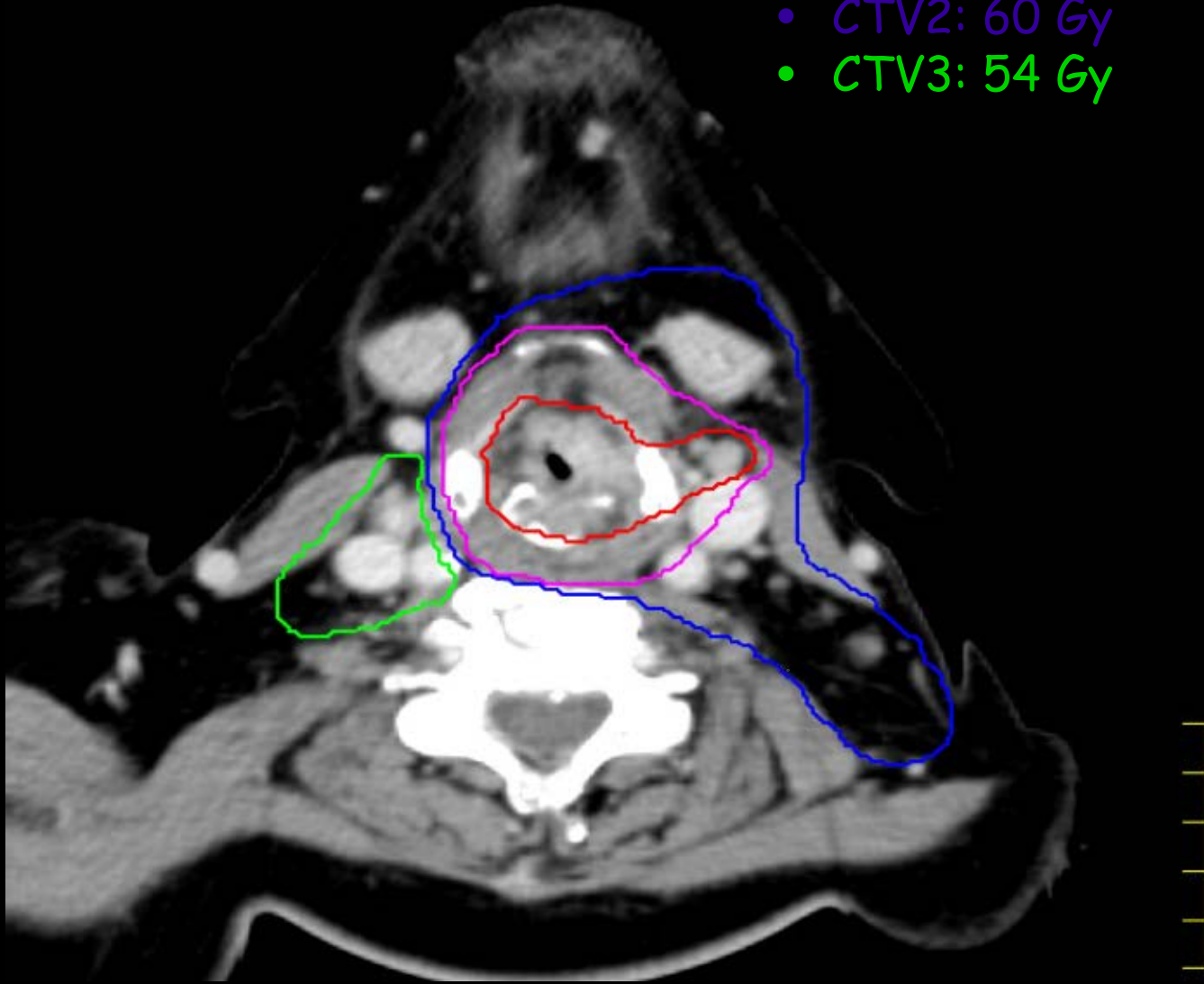
- GTV: 70 Gy
- CTV Intermediate: 63 Gy
- CTV2: 60 Gy
- CTV3: 54 Gy



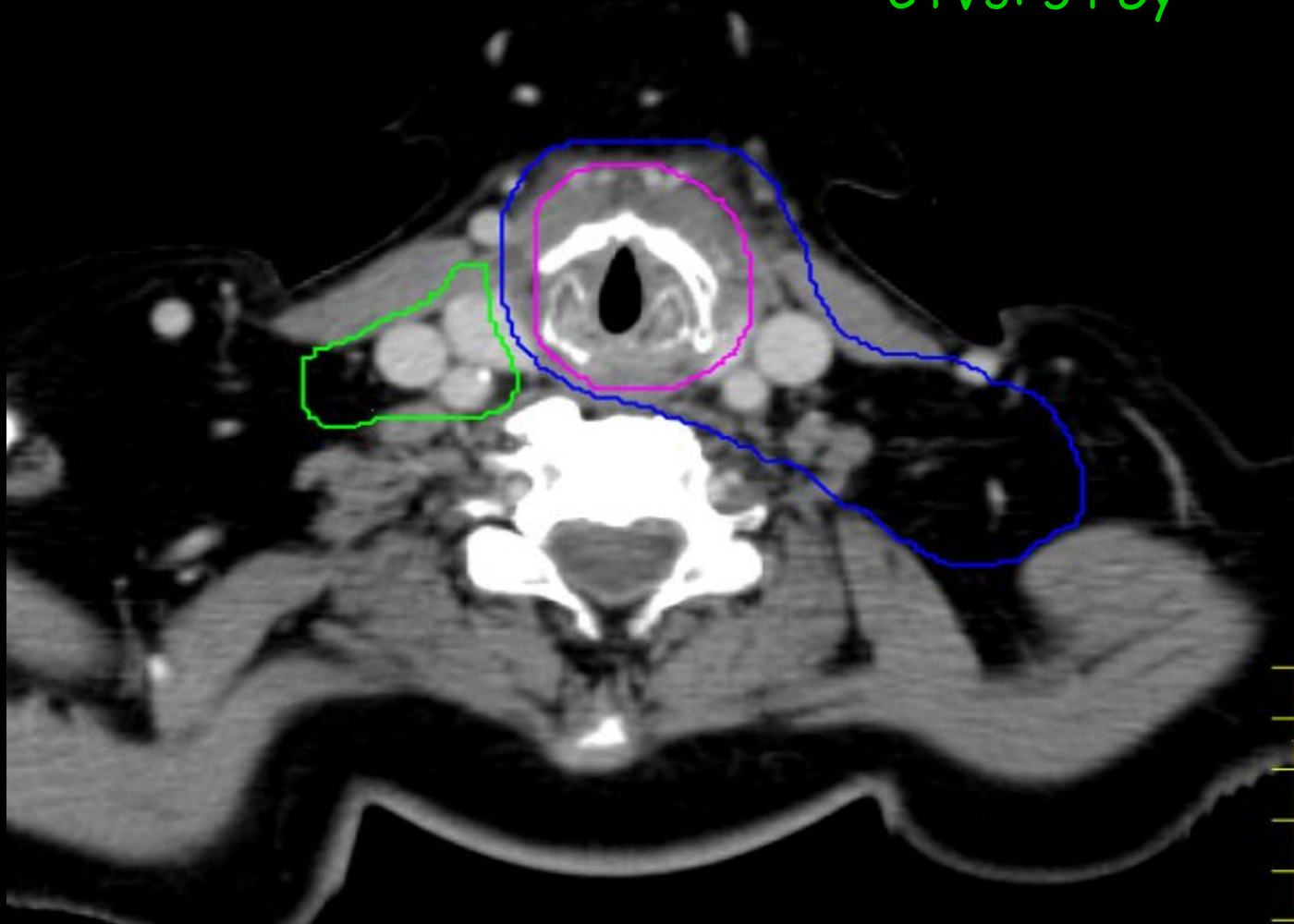
Note: In presence of gross level II node, ipsilateral level IB included in CTV2.

Important to include muscle belly if suspected extracapsular extension

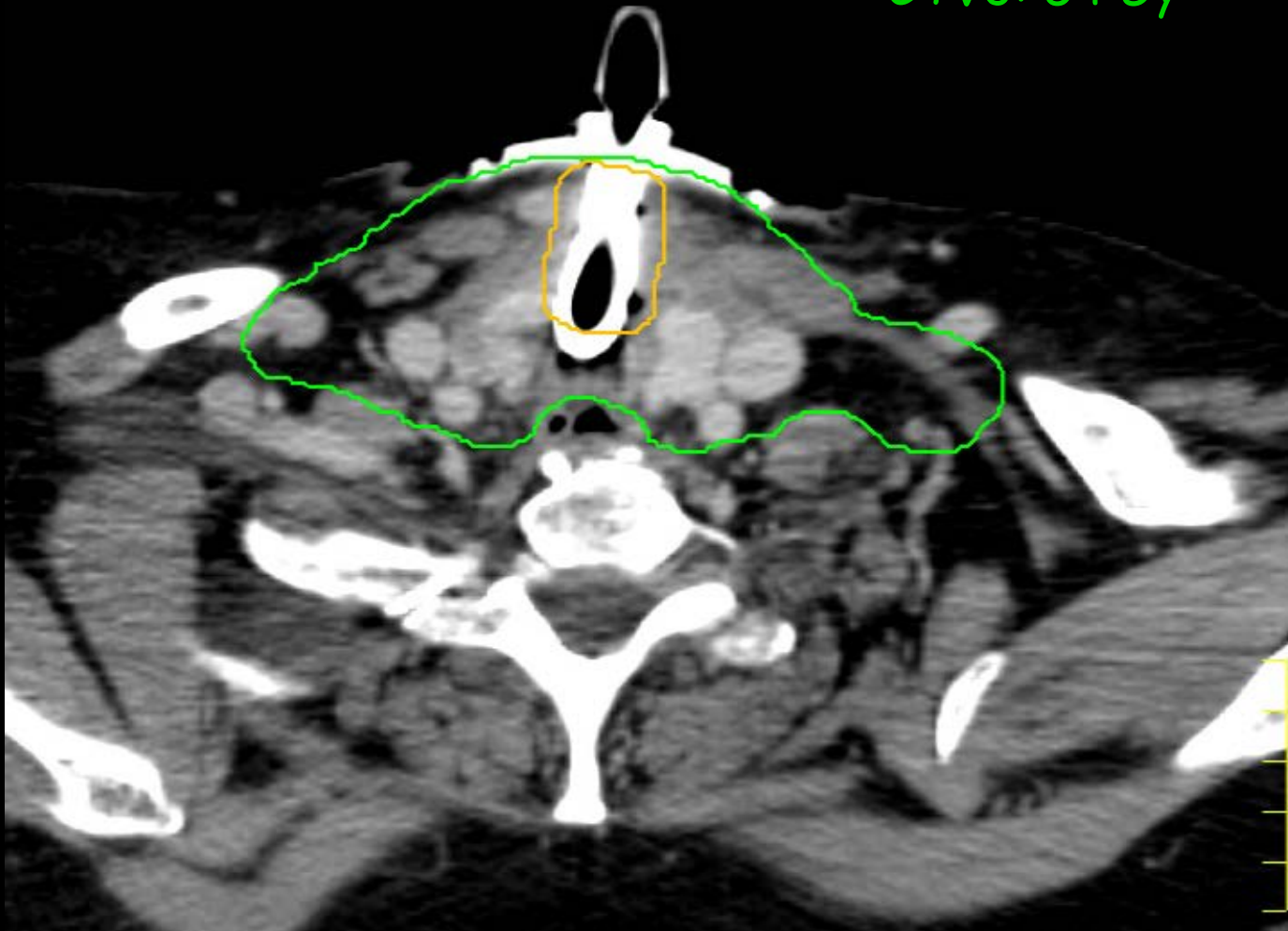
- GTV: 70 Gy
- CTV Intermediate: 63 Gy
- CTV2: 60 Gy
- CTV3: 54 Gy



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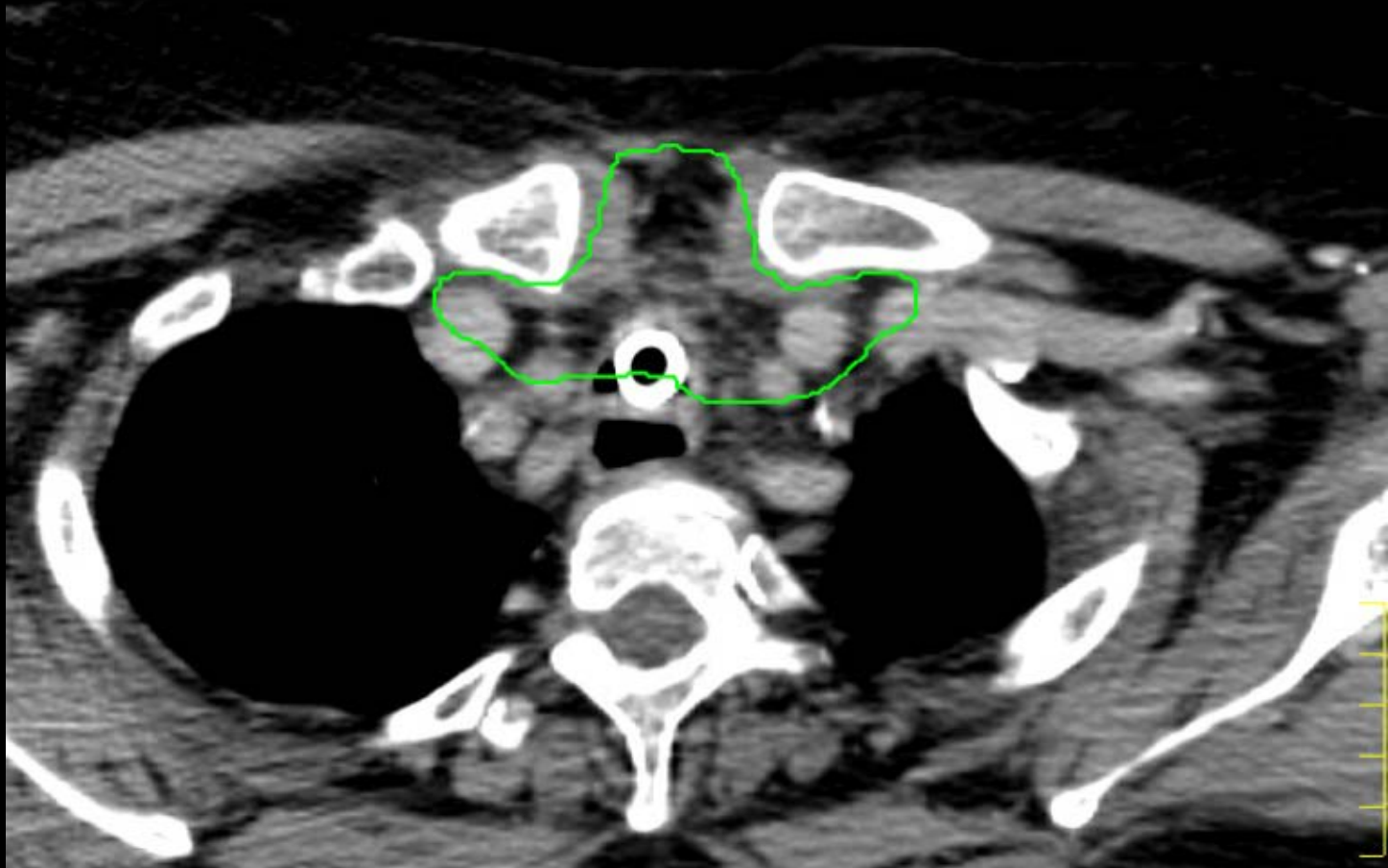


- GTV: 70 Gy
- CTV Intermediate: 63 Gy
- CTV2: 60 Gy
- CTV3: 54 Gy

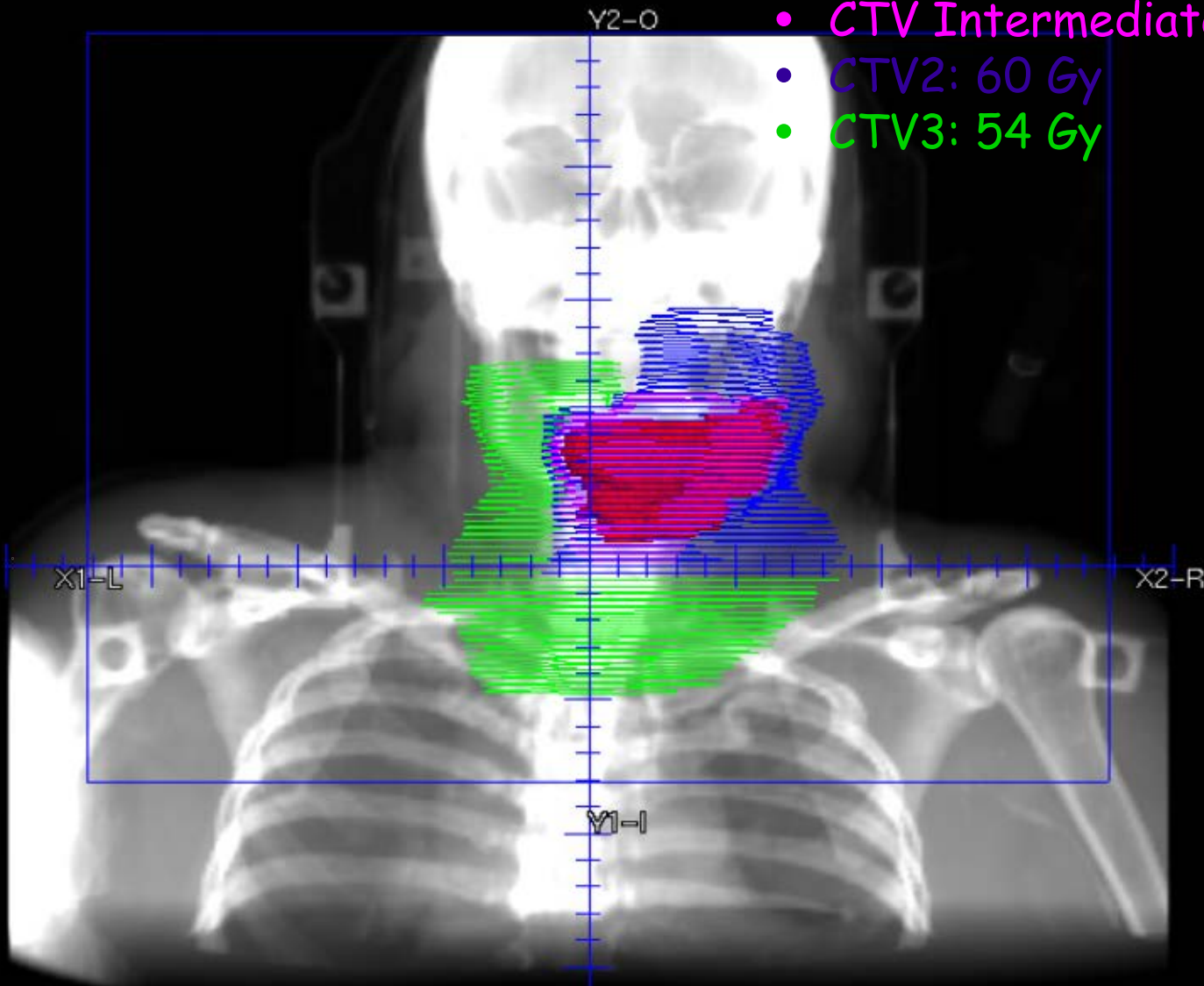


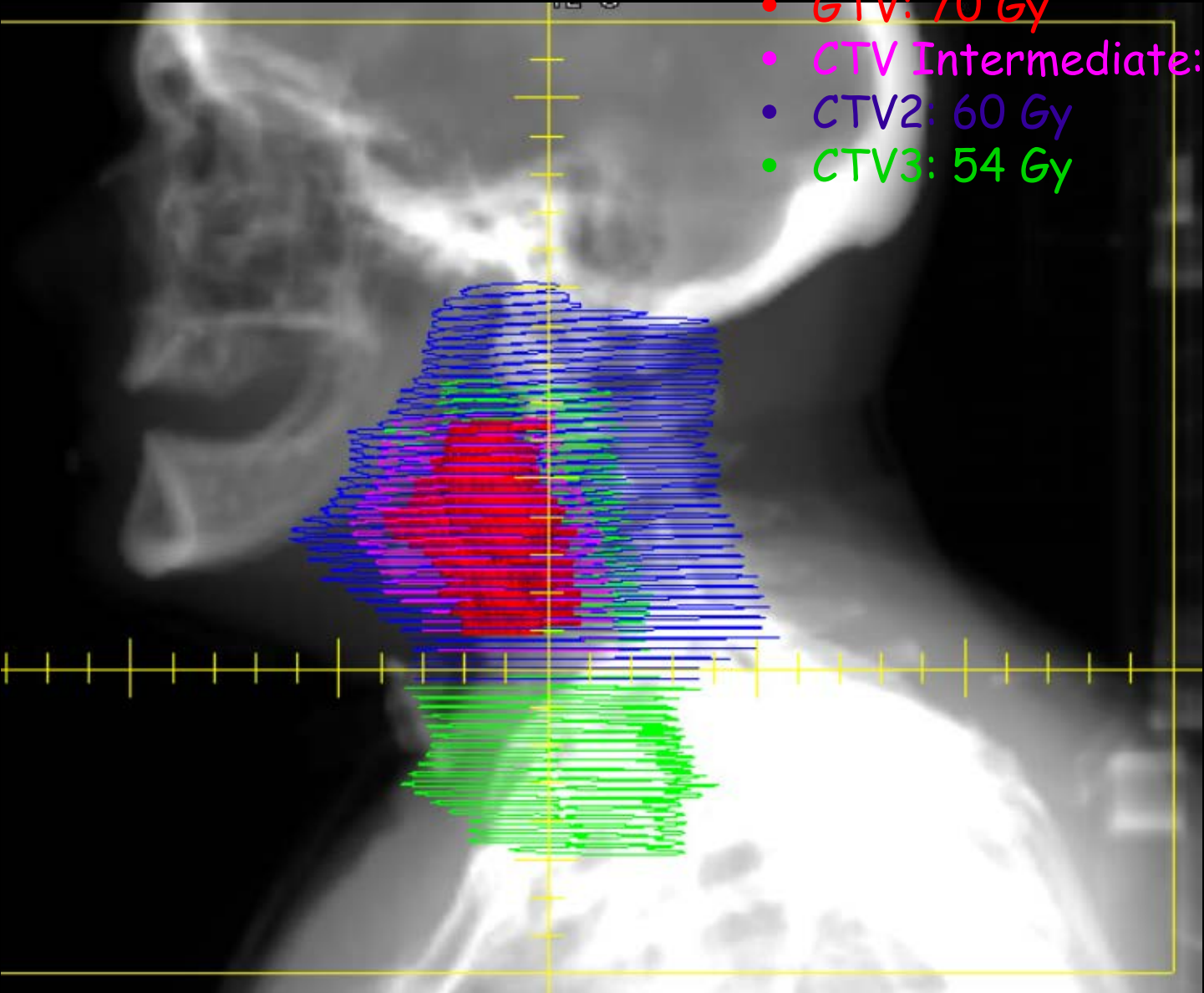
Note: Stoma drawn as a separate contour and included in CTV3.

- GTV: 70 Gy
- CTV Intermediate: 63 Gy
- CTV2: 60 Gy
- CTV3: 54 Gy



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- CTV Intermediate: 63 Gy
- CTV2: 60 Gy
- CTV3: 54 Gy