Contouring and treatment planning for Head and Neck DLBCL

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Case

- 60 yo male
- Right cervical LAD
- No B symptoms
- Good PS, normal LDH
- Bx: DLBCL
- Stage IA
- IPI = 0
- Tx recs?
Case

• Treatment recommendations for non-bulky, stage I or II DLBLC, without adverse risk factors:
  – R-CHOP x 3 cycles + RT
  Or
  – R-CHOP x 6 cycles +/- RT
Treatment Summary: DLBCL

DLBCL

Stage I, II
- IPI = 0
  - RCHOP x 6
  - or
  - RCHOP x 3 + RT (30 Gy)
- IPI ≠ 0
  - RCHOP x 6 + RT (30 Gy; 36 Gy if bulky; 40-45 Gy if FDG avid)

Stage III, IV
- RCHOP x 6-8, RT in select cases (bulky, paraspinal, refractory, prep for SCT)

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RT Doses in DLBCL

• PET complete response: 30 Gy (NCCN 30-36 Gy)
• PET partial response: boost to 40 Gy (NCCN 40-50 Gy)
• Chemo refractory or cannot receive chemo: 45-55 Gy or perhaps 1.3-1.4 Gy BID to 36-40 Gy

Phan et al. JCO 2010
Contours and Radiation Plan

3060 cGy in 17 fx using IMRT to involved sites
Pretreatment PET

GTV  CTV  PTV
Pretreatment PET

GTV  CTV  PTV
Pretreatment PET

GTV    CTV    PTV
Pretreatment PET

GTV       CTV       PTV
Pretreatment PET

GTV  CTV  PTV
Pretreatment PET

GTV  CTV  PTV
Pretreatment PET

GTV

CTV

PTV
Pretreatment PET

\begin{itemize}
  \item \textbf{GTV}
  \item \textbf{CTV}
  \item \textbf{PTV}
\end{itemize}
Pretreatment PET

GTV

CTV

PTV
Pretreatment PET

GTV

CTV

PTV
Pretreatment PET

GTV  CTV  PTV
Pretreatment PET

GTV  CTV  PTV
Pretreatment PET

GTV  CTV  PTV
Treatment Plan
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