Management of the nodal areas in vulva carcinoma

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SASGO 2016
Introduction

Number of uncertainties – rare disease/limited international experience

- Early stage
- Locally advanced

Disclaimer: I am a radiotherapist!
Early stage
T1/Small T2 <4cm

Clinically node negative

International guidelines
  ◦ sentinel node biopsy
  ◦ unilateral or bilateral depending on location.
  ◦ Groin node dissection if no sentinel nodes found
  ◦ Experienced surgeon
Guidance from the sentinel node trials

GROINSS-V I
SLNB if negative not for groin dissection
67% of the cohort were SLNB negative
Primary isolated groin recurrence rate = 2.5%
Fig. 2. Local recurrence rate for SN-negative and SN-positive patients.


Sentinel nodes in vulvar cancer: Long-term follow-up of the GROningen INternational Study on Sentinel nodes in Vulvar cancer (GROINSS-V) I
Ongoing Trials

GROINSS-V II

- RT v.s groin dissection if SLNB+
- Avoid morbidity of surgery + RT
- Recruitment ending 09/2016

- SLNB negative -> observe
- SLNB Positive -> RT
  - 20% with macromets have **relapsed** in the groins
- Now if SLNB positive -> groin dissection +/-RT
- <2mm SLNB+ disease → RT alone
Locally advanced
Locally advanced with clinically node negative groins

GOG-88

- Vulvectomy followed by inguinal RT
  - 50Gy to 3cm
  - Vulvectomy/ groin dissection and RT as needed

- Notable increase in groin recurrence in the RT only arm
- Study closed at interim analysis

- Recommend groin dissection standard of care +/- RT
- Now an international standard
GOG 205 - Phase II neoadjuvant chemoradiation

40 patients

Pre-op groin dissection if suitable

Increased dose to 57.6Gy and addition of weekly Cisplatin 40mg/m2

Eliminated treatment breaks

6 week biopsy - Surgery if gross or microscopic residual disease +/- groin dissection if now operable

Table 3
GOG studies of preoperative chemo-radiation: locally-advanced vulva carcinoma.

<table>
<thead>
<tr>
<th></th>
<th>GOG 101</th>
<th>GOG 205</th>
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<tbody>
<tr>
<td>Evaluable</td>
<td>71</td>
<td>58</td>
</tr>
<tr>
<td>CCR</td>
<td>34 (48%)</td>
<td>37 (64%)</td>
</tr>
<tr>
<td>PCR</td>
<td>22 (31%)</td>
<td>29 (50%)</td>
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<tr>
<td>PCR/CCR</td>
<td>22/34 (65%)</td>
<td>29/37 (78%)</td>
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CCR = Clinical Complete Response.
PCR = Pathological Complete Response.
Locally advanced with clinically involved nodes

Patient group who decline surgery necessitating stomas

Locally advanced including grossly involved nodes

Medically inoperable

Pelvic nodes involved (M1)

Cochrane review 2011 showed *no OS benefit* or *difference in toxicity* between primary chemorad vs. pre-op RT vs. primary Sx

Consider primary CRT to avoid morbidity of groin node dissection
Factors to consider for primary CRT

Dose >64GY

Use of good imaging techniques – MRI or PET-CT scanning

Advanced RT techniques – IMRT/VMAT boost to involved pelvic nodes
Fig. 1. Kaplan–Meier curves showing overall survival for all 20 patients in this cohort in the first 10 years of follow-up. Forty-three percent of patients remained alive at 10 years. Two patients remained at risk after 10 years of follow-up.

Nikhil G. Thaker, Ann H. Klopp, Anuja Jhingran, Michael Frumovitz, Revathy B. Iyer, Patricia J. Eifel

*Survival outcomes for patients with stage IVB vulvar cancer with grossly positive pelvic lymph nodes: Time to reconsider the FIGO staging system?*
Nikhil G. Thaker, Ann H. Klopp, Anuja Jhingran, Michael Frumovitz, Revathy B. Iyer, Patricia J. Eifel

Survival outcomes for patients with stage IVB vulvar cancer with grossly positive pelvic lymph nodes: Time to reconsider the FIGO staging system?
Post-operative RT

Post groin dissection
- ≥ 2 involved nodes
- 1 node ≥ 2mm metastasis

Treat the involved side/ bilateral

Chemoradiation to be considered

50.4 GY or above if ECE/ tumour in soft tissue
Technique
Is groin failure post-RT failure in technique?

GOG-88

- 3cm depth
- 12-15Mev electrons 50% + 4-6MV 50%

Small study samples have found deep femoral vessels are at a mean of 6cm.

Current trials based on 3-D or IMRT volumes

GOG- 88 probably missed 50% of the nodes at depth

GROINSS- V II (ongoing)

CT-planned

0.5 cm around vessels = CTV

I. Stehman F et al. I. J. Radiation Oncology Biology Physics Volume 24, Number 2, 1992
Extrapolate the RTOG volumes for anal Ca
= inguino-femoral compartment
Based on studies that show nodes range 10-35mm around vessels
GROINSS-VII probably underdosing on the current protocol

IMRT/VMAT

Advantage of reduced dose to bowel/femoral heads/bladder/rectum/skin

Advanced, accurate techniques could provide an alternative to groin dissection of the clinical negative groin
Fig. 1. (A) Beam arrangement with IMRT covering PTV (red). (B) Prescription isodose line (yellow) covering PTV (red). (C) Prescription isodose line (yellow) covering PTV (red).

Sushil Beriwal, Devin Coon, Dwight E. Heron, Joseph L. Kelley, Robert P. Edwards, Paniti Sukumvanich, Kristin K. Zorn, Thomas C. Krivak

Preoperative intensity-modulated radiotherapy and chemotherapy for locally advanced vulvar carcinoma

Concluding thoughts
With improved RT techniques should we offer more CRT in place of surgery/ adjunct to ‘lesser’ surgery/ aggressive RT in advanced cases

Dose escalation post-op to reduce local recurrence

Increased use of MRI/ PET-CT in all ‘radical’ cases – accurate staging key to good decision making

Unique situation in the public sector in SA to have high numbers of vulva carcinoma patients

Collaboration studies to answer these questions
Thank you