Palliative Radiotherapy for Advanced Non-Melanoma Skin Cancer

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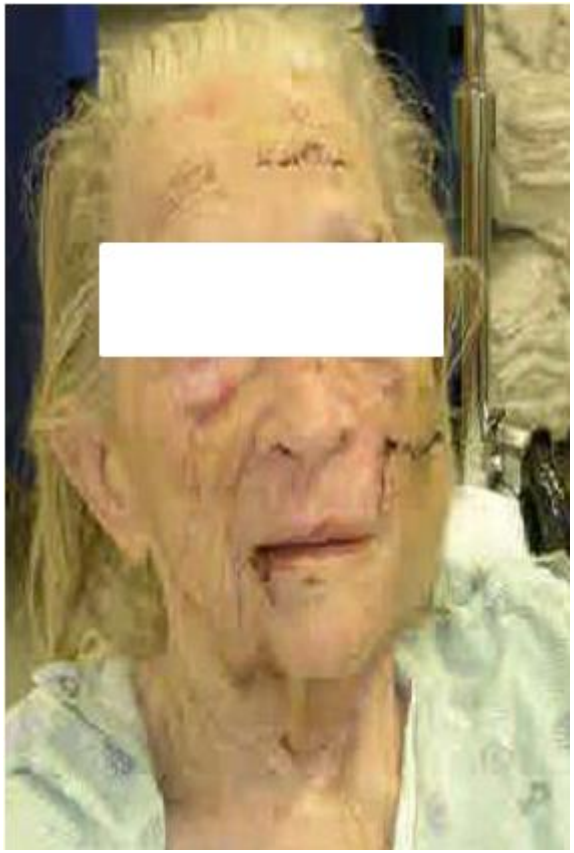
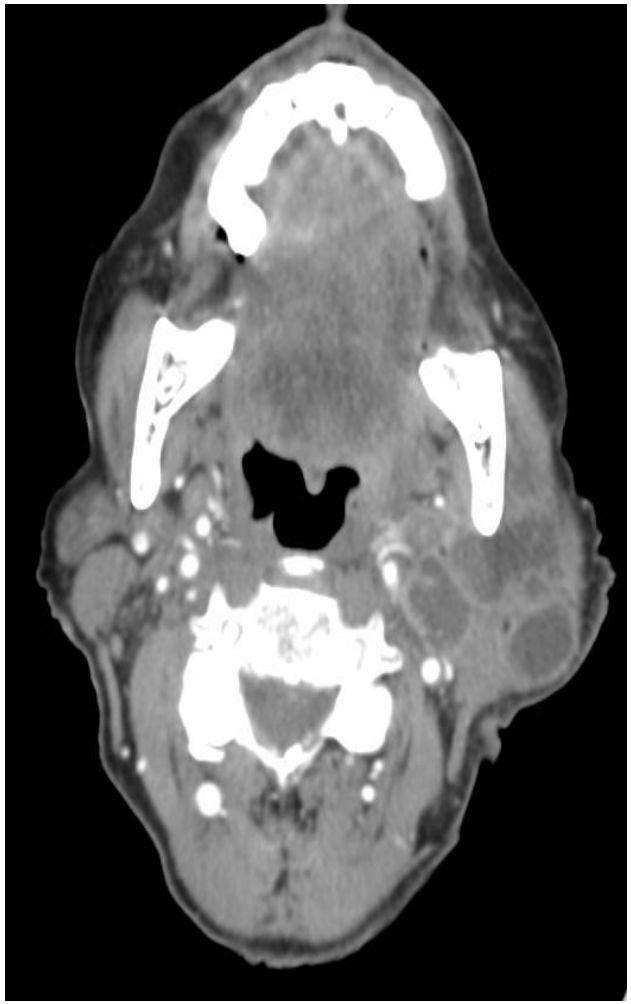
Patient presentation

- 90-year-old woman presented to ED with pain and difficulty eating due to left parotid mass
- ~2 weeks after surgical resection of multiple squamous cell carcinomas of face and FNA left parotid mass at outside facility
- Parotid mass had grown in interval and left cheek incision showed gross tumor



Workup

- CT: numerous positive left cervical lymph nodes
  - 8-cm left parotid mass encasing internal carotid artery
  - Also left levels 2, 3, supraclavicular nodes
- ENT judged her tumor burden was unresectable



General Principles

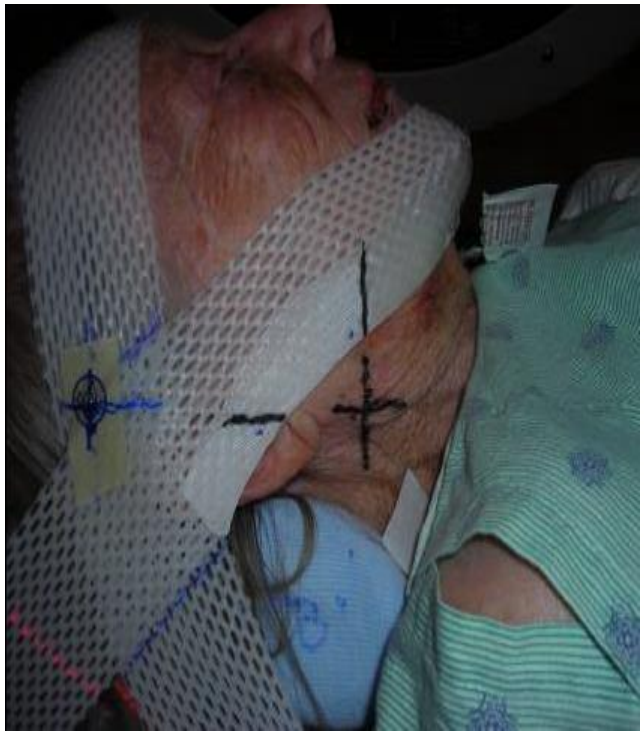
- Definitive treatment requires surgical resection of gross disease
  - Radiation therapy has very poor outcomes for control of gross disease
  - Chemotherapy has not been shown effective in skin cancer
- If considered unresectable:
  - DISCUSS OPTIONS FOR SUPPORTIVE CARE INCLUDING HOSPICE
  - Radiation therapy alone is standard for palliative treatment
- Consider life expectancy (including performance status and comorbidities), burden for patient and caregivers

General management

- Multiple dose fractionations have been effective at improving symptoms with minimal toxicity
  - QUAD shot: 14 Gy in 4 fractions, delivered BID at least 6 hours apart on 2 consecutive days
  - 20 Gy in 2 fractions, delivered 1 week apart
  - 30 Gy in 10 fractions, delivered daily M-F
- May consider treating with orthovoltage or electron radiation if tumor causing symptoms is superficial

Photon radiation planning

- Standard simulation for head and neck treatment
- Supine, arms at side
- Head at 90 degrees
- Thermoplastic mask
- No need for IV contrast since only targeting bulky disease
- Consider bolus for open wounds
- May wire areas of tumor bulk on skin

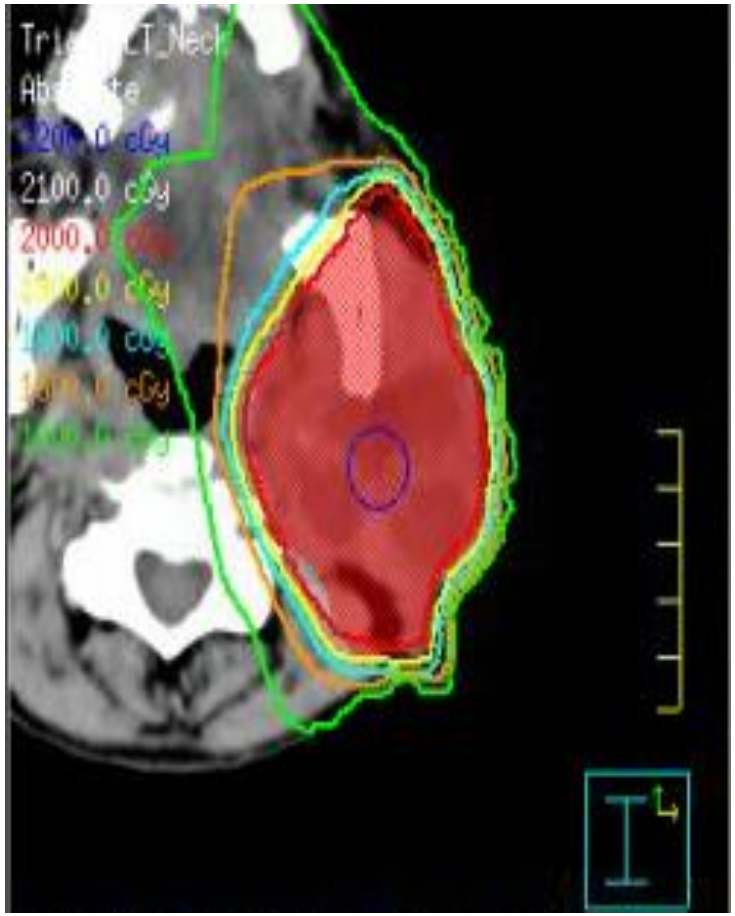


Treatment Planning

- Options include parallel opposed beams, wedge pair, or 3D conformal– IMRT is unlikely to improve toxicity given low doses
- GTV: generally only treating bulky disease causing symptoms, not all tumor visible on CT
- No CTV expansion: not treating microscopic disease
- PTV expansion generally 0.3-1.0 cm-- depends on immobilization, use of image guidance, institution

Patient Radiation Treatment Plan

- Treated to 20 Gy in 2 fractions, 1 week apart
- PTV = GTV and associated nodal stations + 3 mm
- 6 MV photon beams
- IMRT with CBCT



The QUAD SHOT– a phase II study of palliative radiotherapy for incurable head and neck cancer

- PTV: Large volume gross disease + 2 cm
- Most patients were treated with parallel opposed fields with dose prescribed at midplane

– 14 Gy in 4 fractions, delivered BID at least 6 hours apart on 2 consecutive days

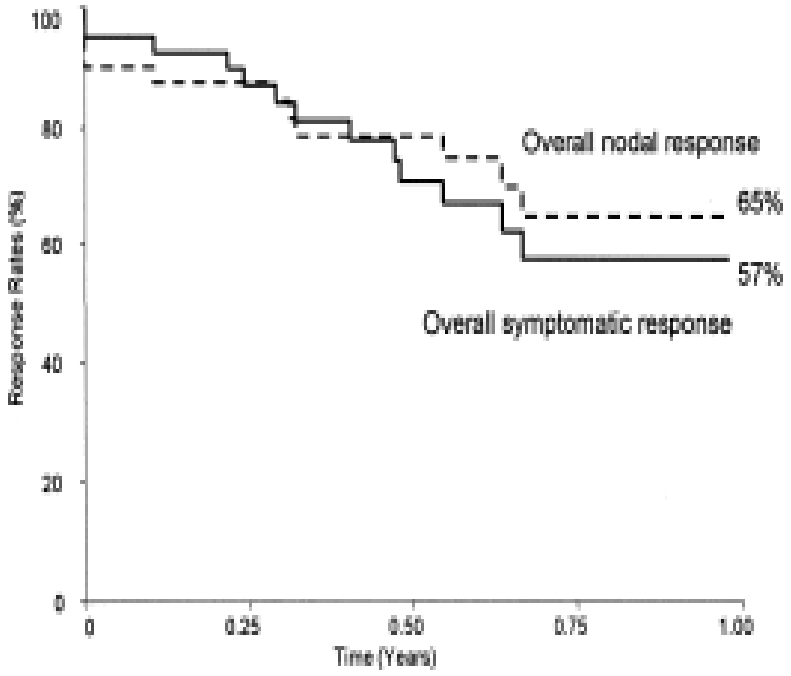
- Repeat at 4-weekly intervals for up to 2 more courses if no tumor progression or significant acute toxicity

- 9 patients with grade 1 mucositis, 3 with grade 2
- 85% stable or improved dysphagia
- 56% stable or improved pain
- 67% stable or improved performance status

Radiother Oncol. 2005;77(2):137-42.

Squamous cell carcinomas metastatic to cervical lymph nodes from an unknown head and neck mucosal site treated with radiation therapy with palliative intent

- 40 patients with squamous cell carcinoma of unknown head/neck treated with palliative intent
- 22 treated to 30 Gy in 10 fractions
- 18 treated to 20 Gy in 2 fractions
- No severe acute or late complications
- Symptomatic response at 1 year: 68% continuous, 38% split-course



Radiother Oncol. 2001;59:319-321.

Additional Considerations

- If treating with QUAD SHOT or 10 Gy x 2, see patient in clinic before treatment on second day– ensure that toxicity was minimal
- Discuss life expectancy (if patient desires) and low likelihood of cure with treatment
- Ensure good supportive care with symptom control– effects of radiation will not be immediate

Patient Outcome After Radiation

- ~1 month later: All visible and palpable tumor had regressed; no toxicity from RT
  - Eating regular diet without issues
  - Dobhoff tube was removed
- ~2 months later: New-onset contralateral cervical lymph nodes
  - Treated with 20 Gy in 5 fractions
- Discharged to hospice and died at home 2 months later

~1 month after RT:

References

- Corry J, Peters LJ, Costa ID, Milner AD, Fawns H, Rischin D, Porceddu S. The QUAD SHOT– a phase II study of palliative radiotherapy for incurable head and neck cancer. Radiother Oncol. 2005;77:137-42.
- Erkal HS, Mendenhall WM, Amdur RJ, Villaret DB, Stringer SP. Squamous cell carcinomas metastatic to cervical lymph nodes from an unknown head and neck mucosal site treated with radiation therapy with palliative intent. Radiother Oncol. 2001;59:319-21.