SQUAMOUS CELL CARCINOMA OF THE ORAL TONGUE

Management of the Neck in Early Stage Lesions

Alyson Buckner, MD
Johns Hopkins Hospital/GBMC
Department of Otolaryngology
Majority are SCCa

Primary sites include: lip, oral tongue, floor of mouth, buccal mucosa, palate, alveolar ridge, retromolar trigone

Represent 2-4% of all cancers, with 20,000 new cases/year
ORAL TONGUE SCCA

- Patient population: male>female, elderly, smokers
- Location: lateral>anterior>dorsal and ventral surfaces
- Most likely of all oral cavity subsites to have cervical lymph node mets at time of presentation (30-50% )
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REGIONAL METASTASES

- Lymph node status single most important prognostic factor in survival, with 50% decrement in survival for single involved node
- Orderly progression of nodal involvement Level I->III (IV, rarely V)
- Goal: therapeutic intervention for only those with N₀ necks at risk
PREDICTION OF METASTASES

Difficult to do a priori with high level of certainty

Overtreatment
- increased morbidity
- poor use of resources

Undertreatment
- decreased survival
“...clinical fallibility of palpation of the neck is well-documented.”

- Clinical exam of neck --> false negative rate 30-40%
- CT/MRI --> false negative rate 20%
- Combined --> 15%
TREATMENT

- T3 and T4 (advanced) lesions --> extensive primary resection, neck dissection, radiation
- T2 --> local resection with neck dissection or radiation
- T1 --> limited resection with neck dissection or radiation
CONTROVERSY IN MANAGEMENT OF $N_0$ NECKS

Should all patients with T1N0 lesions undergo definitive therapy in the neck?

Is there an approach to the neck which is based on the actual presence of occult disease, rather than the theoretical risk of occult disease?
EVOLUTION OF THERAPY FOR REGIONAL METASTASES

Crile--radical neck dissection

Bocca--modified neck dissection

M.D. Anderson--selective neck dissection

Present and future--limitation of number of patients who undergo surgery
Dermal (mucosal) lymphatic drainage is orderly

Identification of the first lymph node(s) encountered by in-transit cancer cells is desirable

Invasive therapy is predicated on presence of metastases in the sentinel node
SENTINEL NODE BIOPSY

Injection of Tc-sulfur colloid at primary tumor site

Detection of radioactivity at discrete site(s), corresponding to the sentinel node(s)

Limited excision of sentinel node(s)
PITFALLS

- Difficulty with accurate injection
- Failure to localize sentinel node
- Diversion of lymph flow by disease or prior treatment
TREATMENT

- T3/T4 lesions-->as previously described

- T1/T2 lesions-->primary resection with adequate margin; treat necks when chance of occult mets reaches 30% (e.g. lesions thicker than 5 mm, any T2, poor tumor characteristics)

- External beam radiation indicated for ECS, multiple involved nodes at multiple levels, perineural/angiolympathic invasion, positive (or close) margins, poorly differentiated tumors
SUMMARY

- Incidence of occult regional metastases high in tongue SCCa
- Discerning probability that a particular patient has occult mets difficult
- Neck disease must be eradicated in the $N_0$ neck to optimize survival