SQUAMOUS CELL CARCINOMA OF THE ORAL TONGUE

Management of the Neck in Early Stage Lesions

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ORAL CAVITY MALIGNANCIES

- 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%)

TREATMENT OPTIONS

Primary Tumor

- Local excision
- Radiation

Regional Metastases

- Neck dissection
- Radiation
- (Observation)

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 N_0 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

PREDICTION OF METASTASES

"…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

SENTINEL NODE THEORY

- 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/angiolymphatic 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