Squamous Cell Carcinoma of the Head and Neck Arising from Unknown Primary

Case Presentation and Discussion

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Case Presentation - R.D.

- 48 yo male, h/o SCCA unknown primary, 1998
- CC: L neck, jaw pain
- HPI:
  - 5/98: L neck mass, ? increasing in size
  - 7/98: FNA negative for malignancy
    - CT: 3 x 3.3 cm cystic mass c/w branchial cleft cyst
    - 8/98: excision of L neck mass
      - Pathology: SCCA
      - F/u CT: RLL nodule, 3 mm
    - 9/98: panendoscopy, directed biopsies, L tonsillectomy, L completion ND
      - Stage III, T₂N₂M₀
    - Post-op XRT to L neck and putative primary sites
Case Presentation - R.D.

• Followed at 2-3 month intervals, NED
• 8/00: c/o L neck, jaw pain
  – PE negative for signs of tumor
• 9/5/00: DL, bronch, EGD → L BOT lesion
  – Pathology: SCCA
• CT: Poorly differentiated mass at L BOT, crossing midline, 4.1 cm x 2.9 cm
Case Presentation - R.D.

• 9/26/00:
  – PEG
  – Trach
  – R cervical lymph node excision (neg on FS)
  – Supraglottic laryngectomy w/mandibular swing
  – Reconstruction using L RFAFF

• Social Hx: negative for tobacco or Etoh use
• Family Hx: Uncle with H&N cancer
Radiology Review
Pathology Review
SCCA Metastatic to the Neck with Unknown Primary Site

• Incidence
• Diagnosis / Work-up
• Treatment / Prognosis
• Future Trends
Metastatic SCCA with Unknown Primary

- Common presentation
  - cervical lymph node, + for malignancy
- 20-50% will have identifiable primary upon further w/u

- “Unknown Primary” of H&N Cancer
- Incidence: 2 - 9%
- 2 - 20% of all unknown primary tumors will surface over time
Unknown Primary:
Frequent Sites of Primary Tumor Location

- Nasopharynx
- BOT
- Tonsil
- Hypopharynx
- Supraglottic Larynx
- Lung
Adult with a neck mass known to be SCCA

HISTORY
- Smoking
- Alcohol
- Family Hx of cancer
- Epistaxis
- Nasal Obstruction
- Rhinorrhea
- Chronic Sinusitis
- Otalgia
- Throat pain
- Dysphagia
- Dysarthria
- Hoarseness
- Voice change
- SOB
- Pruritis of scalp, ears, face, neck

PHYSICAL EXAM
- Skin (scalp and face)
- Ears (auricle and external canal)
- Nose (skin and mucosa)
- Oral cavity and oropharynx (palpation of all mucosal surfaces, especially the tonsils, BOT, FOM)
- Salivary Glands (palpation of parotid and submandibular glands)
- Neck (documentation of size & location of all masses, thyroid palpation)
- Larynx (indirect laryngoscopy)
- Nasopharynx (FOL)
- Other (toluidine blue staining)

PANENDOSCOPY
- Nasal endoscopy
- Nasopharyngoscopy
- Hypopharyngoscopy
- Direct laryngoscopy
- Bronchoscopy
- Esophagoscopy

RADIOGRAPHIC STUDIES
- CT/MRI of head and neck
- Chest CT
- CXR
- Sinus CT

BILATERAL GUIDED BX
- Nasopharynx
- Tonsils/Tonsillectomy
- Piriform sinus
- BOT

Adapted from Gabalski and Belles, ENT Journal 79: 306-13.
Diagnosis / Work-up

• Biopsy
  – Random
  – Guided
  – “...biopsy taken in absence of gross malignancy from an area known to have a high probability of containing the primary tumor.”

• Tonsillectomy
Treatment

• Surgery
  – excision
  – (M)RND

• XRT
  – nodes only vs. putative primary tumor sites

• Surgery + adjuvant XRT
  – 5-year regional control rate 88-95%

• Surgery + adjuvant XRT/Chemo
  – Cisplatin, Mitomycin C
Prognosis

• 5-year disease-free survival: 27 - 76%

• Factors associated with poorer prognosis:
  – *Presence of extracapsular disease*
  – *Increased nodal disease*
  – Treatment failure / presence of residual disease
  – Development of primary lesion
  – Open biopsy
  – Presence of supraclavicular lymph nodes
  – Adenocarcinoma vs. SCCA
Prognosis

• No influence on prognosis (*Colletier et al, 1998*):
  – Radiation dose
  – Duration of XRT
  – Time between surgical resection and start of XRT
  – Lymph node size
Future Trends

• PET Scan

• Fluorescence-Guided Biopsy (Kulapaditharom et al, 1999)

• Cancer Genetics
  – Microsatellite analysis
    • 55% histologically benign specimens “matched” microsatellite analysis of known tumor (Califano et al, 1999)
  – PCR detection of EBV genome
    • 7/9 lymph node specimens positive for EBV genome were of nasopharyngeal origin (Nguyen et al, 1994)