CASE PRESENTATION
Synchronous Squamous Cell Carcinoma of Hypopharynx and Esophagus

M/49
Good past health
Chronic smoker and drinker
Presented to ENT surgeons in 1/09 with worsening HOV for 6 months
No dysphagia
No choking
No hemoptysis

Physical examination found a 1cm mobile Rt mid cervical LN, FNAC → SCC
Flexible laryngoscopy found
- Irregularities of both vocal cord
- Swollen Rt false cord and arytenoid
- Impaired movement of Rt VC

Examination under Anesthesia
- Microlaryngoscopy and pharyngoscopy (GA) in 2/09
- Findings:
  - Hypopharyngeal tumour arising from Rt piriform fossa, with irregularities over Rt epiglottis, Rt pharyngoepiglottic fold 2cm away from cricopharyngeus
  - Irregularities at Lt and Rt true VC, separated from main tumour
  - Subglottis clear

Bx taken at various sites
- Rt pyriform fossa → SCC
- Rt epiglottis, Rt pharyngoepiglottic fold → severe dysplasia
- Rt VC → SCC
- Lt VC → moderate dysplasia

Question #1
- ?Pan-endoscopy
  - Pharyngoscopy + Laryngoscopy
  - OGD
  - Bronchoscopy
Screening for Second Primary

- ChromoOGD:
  - Circumferential irregular mucosa 25-30cm. Bx → severe dysplasia
- Repeat Bx → severe dysplasia

Disease Staging

- CT scan of neck to abdomen:
  - Carcinoma of hypopharynx without invasion to surrounding structure
  - Enlarged Rt level II and III cervical LN
- Private PET scan:
  - Hypermetabolic lesion at Rt piriform fossa
  - Nodal metastasis in Rt upper and middle jugular chains

Management

- Managed as
  - Carcinoma of Rt hypopharynx
  - Severe dysplastic esophagus

Question #2

- Management options
  - Treating both lesions in one setting?
  - Treating one lesion first, followed by another in another setting?
  - Treatment modalities (Surgery / Primary chemoRT / Combined)?

What was done

- PLO + Rt RND + gastric pull-up for free jejunal flap done in 3/09 by ENT, UGI and H&N surgeons
- Esophagectomy approach: VAT + laparoscopic assisted
Intraoperative Findings (I)

- Carcinoma of Rt hypopharynx
  - Tumour over Rt piriform fossa, extending superiorly towards lower pole of Rt tonsil
  - Rt vocal cord tumour
  - Multiple Rt cervical LN
  - FZ of margins showed SCC at margin of hypopharynx and tongue base
  - Further resection done at the positive margins showed no malignancy

Carcinoma of Rt Piriform Fossa

Right Vocal Cord Tumour

Intraoperative Findings (II)

- Carcinoma of esophagus
  - 3cm esophageal mucosal irregularities
  - No lung / pleural metastases
Pathology

- Synchronous carcinoma of esophagus and hypopharynx
  - Carcinoma of hypopharynx with Rt cervical LN involvement (T2N2b), tongue base margin involved
  - Carcinoma of esophagus with no involvement of upper/lower and subcarinal LN (T1N0), margins clear

Adjuvant Treatment

- Seen by oncologist, for post op chemoRT (Cisplatin)
- ChemoRT completed in 6/09

Post Operative Course

- Follow up regularly by ENT and UGI surgeons
- Oral feeding tolerated initially, subsequently required R/T feeding
- Breathing via end tracheostomy
- Communicate with electrolarynx

- SOB and blood stained sputum in 8/09
- Flexible laryngoscopy showed irregular tissue over posterior tracheal wall, Bx SCC
- CT neck to abdomen
  - Soft tissue density at Rt of jejunal anastomosis? recurrence? postoperative change
  - Bilateral lung nodules <3mm non-specific but lung secondaries cannot be ruled out
OGD (8/09):
- Tumour recurrence at gastric tube from 19-24cm, Bx SCC
- Seen by oncology, no room for further RT
- For conservative management

Developed chest infection and malignant hypercalcemia and SVCO in 10/09
- Condition progressively deteriorated and succumbed on 24/10/09

Summary
- Carcinoma of hypopharynx (T2N2b) and esophagus (T1N0) in 1/09
- PLO with margin involvement in 3/09
- Post op chemoRT received
- Disease recurrence in 8/09
- Succumbed in 10/09

Discussion

Warren and gates:
1. Clearly malignant on histological examination
2. Separated by normal mucosa
3. Exclude the possibility of metastasis

Discussion

Billroth (1860): described multiple upper aerodigestive tract cancer occurrence
Slaughter (1953): proposed the field cancerization in oral stratified squamous epithelium
Two factors in carcinogenesis: tobacco (carcinogen) & alcohol (promotor)

Discussion

The multicentric occurrence of tumors of the upper aerodigestive tract with an incidence ranging from 5 to 16%
- 1-2.4% patients with squamous carcinoma of the H&N developed carcinoma of the esophagus.
Discussion

- Routine triple endoscopy of H&N SCC patients \(\Rightarrow\) Synchronous SCC occurs in 10% of H&N, lung, or esophagus of patients
- 5.5% of H&N SCC had synchronous lung and/or esophageal cancer identified
- 1.5% was asymptomatic and not suspected after detail examination and simple investigation

Esophageal carcinoma was observed in:
- none of the oral cavity cancer
- 1.3% of oropharyngeal cancer
- 2% of laryngeal cancer
- 9.2% of hypopharyngeal tumor

Treatment options

- Primary chemo-radiotherapy
- Primary surgery
- Combined
- ? neoadjuvant

- cis-platinum combination chemotherapy followed by definitive locoregional therapy (surgery and/or radiation therapy).
- 77% patients responded to chemotherapy in all the tumor sites evaluated, and a clinically complete response in 29%
- After definitive locoregional treatment, the complete local control rate was 68%
- Median survival for the overall group is 17 months

The combined procedure with free tissue graft and esophagectomy was useful for surgical treatment for synchronous or metachronous carcinomas of the head and neck and the esophagus

Treatment strategies for esophageal carcinoma were similar in patients with and without multiple tumors, not influenced by the non-esophageal tumor except in 6 patients.

The overall survival of patients with antecedent tumors, synchronous tumors, and without multiple tumors was similar
References


