Malignant Salivary Gland Tumors in Children

Dr. Sajid. S. Qureshi
Associate Professor, Pediatric Oncology
Tata Memorial Hospital
Mumbai, INDIA
• Tumors of salivary gland are relatively uncommon in children and adolescents - 1% of all pediatric neoplasms
• 8% of all pediatric head and neck neoplasms
• 35% of all salivary gland masses in children are malignant
• Rarity of salivary gland tumors makes it impossible for any institution to gain solid experience in their diagnosis and therapy.

• Salivary gland tumors treated between January 2005- June 2011

• Benign tumors were excluded
Demography

- 21 patients with malignant salivary gland tumor
- Median age – 10.5 years (range 5 – 17 years)
- Male : Female – 13:8
Symptoms

- Median duration of symptoms – 6 months (range 15 days – 3 years)
- Commonest symptom – swelling
- Pain occasional
- Facial nerve palsy – 1 (post surgery)

Previous surgery: 7 patients
Metastatic disease: 6 patients
Anatomical location

- Parotid: 16 patients
- Submandibular gland: 3 patients
- Minor salivary gland: 2 patients
Surgery

• Superficial parotidectomy: 3
• Total nerve sparing parotidectomy: 9
• Total parotidectomy: 4
• Submandibular gland excision: 3
• Wide excision: 2
Superficial parotidectomy
Nerve Sparing Total Parotidectomy
Total Parotidectomy
Surgery

- Node dissection/sampling: 19
- Node positive: 7
- Reconstruction:
  - Free ALT flap: 2
  - PMMC flap: 2
  - Local flap: 2
  - SSG: 1
Free Flap
Local Island Flap
Histopathology

- Mucoepidermoid carcinoma: 13
  - Low grade: 8
  - Intermediate grade: 4
  - High: 1
- Acinic cell carcinoma: 1
- Rhabdomyosarcoma: 1
- Metastatic: 6
  - Medulloepithelioma: 2
  - Undifferentiated nasopharyngeal carcinoma: 2
  - Squamous cell carcinoma (XP): 2
Adjuvant therapy

• Radiotherapy: 11
  – Mucoepidermoid carcinoma: 5
    • Low grade: 3
    • Intermediate grade: 1
    • High: 1
  – Acinic cell carcinoma: 1
  – Rhabdomyosarcoma: 1
  – Metastatic: 4
    • Medulloepithelioma: 2
    • Undifferentiated nasopharyngeal carcinoma: 2
Recurrence

– Mucoepidermoid carcinoma: Nil
– Acinic cell carcinoma: Nil
– Rhabdomyosarcoma: Nil
– Metastatic: 4
  • Medulloepithelioma: 1 (Total parotidectomy with PMMC)
  • Undifferentiated nasopharyngeal carcinoma: 1 (Axillary LN, followed by neck relapse – died of disease after 5 years)
  • Squamous cell carcinoma (XP): 2
    – New lesions cutaneous and mucosal- both lost to follow-up
Survival

- Median Follow-up – 24 months
- All patients with primary malignant salivary gland tumors are alive
- 2 patients with secondary tumors are alive and disease free
- 4 patients had disease relapse at other sites - 2 died of disease and 2 are lost to follow-up
Conclusion

- Surgical excision is the mainstay of treatment of malignant salivary gland tumors in children.
- Metastatic disease is also effectively treated with surgical excision and radiotherapy.
Thank you