Endoscopic nasopharyngectomy in salvaging locally recurrent nasopharyngeal carcinoma

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Introduction

- Nasopharyngeal carcinoma (NPC) is the 7th commonest cancer in Hong Kong
- > 900 new cases are registered each year
- NPC is primarily treated by radiation or chemoradiation
- The incidence of locally recurrent NPC is around 10-15%
- Nevertheless, local recurrence remains a common sign of treatment failure and a major cause of morbidity and mortality
• The choice of salvage therapy can be surgical or radiation with similar cure rates
• However, long term complications of open surgery or second course of radiation are not negligible
• Endoscopic nasopharyngectomy has recently emerged as a good salvage option with minimal morbidity in other regions
  ◦ this surgical technique has seldom been evaluated locally.
Objectives

- To evaluate the efficacy of endoscopic nasopharyngectomy in salvaging small local recurrence of nasopharyngeal carcinoma
- To improve patient care by reducing post treatment complications
Inclusion criteria

- All isolated local recurrence of NPC
- Stage T1 and T2
Methodology

- The diagnosis of local recurrence is based on endoscopic or radiological detection of a suspicious mass in the nasopharynx followed by histological confirmation
- From Dec 2010 to Oct 2011
  - 5 patients were recruited consecutively
  - treated with endoscopic nasopharyngectomy in QEH
• Computer tomography and magnetic resonance angiography were performed
  • data used for intraoperative navigation guidance
• All patients were operated on with curative intent without postoperative radiotherapy
• Postoperative endoscopic surveillance was performed to ensure complete remission of NPC
Results

• All 5 patients underwent operation
• Negative margins achieved in all patients
• Mean age: 51.4
• M:F = 4:1
• 4 patients → rT1, 1 patient → rT2
• mean time from last irradiation to recurrence was 78 (range: 12-147) months
• No complication associated with the operation
• Average operating time: 154 (range 96-224) mins
• Average follow up period 9.4 (range 3-14) months
• No local recurrence was noted
• Free of regional or distant disease
• All mucosal defects in nasopharynx were healed in 3-5 weeks
Post op 1 year
Discussion

- Problems of reirradiation
  - high risk of acute toxicity
    - e.g. dermatitis, mucositis, dysphagia, xerostomia
  - high chance of late complications (26%-57%)
    - e.g. temporal lobe necrosis, multiple cranial nerve palsies, osteoradionecrosis, trismus, soft tissue fibrosis, hearing and visual impairment, endocrine dysfunction, carotid rupture
    - mortality 1.8% - 9.4%, mainly due to neurological damage
  - long treatment period
    - Need 6 weeks
For surgery, the endoscopic technique has advantages over open techniques:

- avoidance of a facial scar
- less destruction of the surrounding tissues
- reduced complications
- better preservation of function
- shorter operation time
- shorter hospital stay
- faster recovery
• Endoscopic nasopharyngectomy for small local recurrence should be considered as one of the first line treatments

• Besides, early detection of recurrent disease is essential for salvage therapy to be successful,
  ◦ which is possible by close surveillance of patients after local treatment by clinical oncologists and ENT surgeons
Conclusion

- Endoscopic nasopharyngectomy is a **safe** and **effective** salvage procedure for treating rT1 and rT2 NPC with **minimal morbidity**
- It **improves the quality of life** during and after treatment as compared to other modalities of treatments
- It can **potentially reduce the health care costs** in managing long term complications
Limitation

- More patients and longer follow up are needed to further validate the long term results
- The study was conducted in one regional hospital only
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