Methods and Materials

Objectives: Evaluate swallowing dysfunction after radiotherapy (RT) for nasopharyngeal carcinoma (NPC) and can have significant adverse effects on quality of life.1-5 We have observed that patients with dysphagia after RT for NPC have substantially worse swallowing function than patients treated with RT in other sub-sites. The purpose of this investigation was to describe swallowing dysfunction after RT for NPC and compare swallowing parameters to patients receiving RT for cancer from another site.

Methods: Retrospective review comparing fluoroscopic swallowing data of persons with dysphagia after RT for NPC to normal controls and patients with dysphagia after RT for oropharyngeal cancer (OPC).

Results: Thirteen patients with NPC were compared to 13 controls and 13 patients with OPC. Mean hyolaryngeal elevation was 4.03 (±1.27) for normals, 2.96 (±0.86) for OPC, and 2.45 (±1.17) for NPC (p<.01). The pharyngeal constriction ratio (PCR) was 0.07 (±0.08) for normals, 0.40 (±0.24) for OPC and 0.45 (±0.27) for NPC (p<.001).

Conclusions: The data suggest that patients with dysphagia after radiotherapy for NPC have higher rates of gastrostomy tube dependence and aspiration and tolerate smaller boluses than those treated for OPC. Mean HL elevation, PCR, and opening of the pharyngoesophageal segment were significantly decreased in NPC patients compared to normal controls.

References