Late dysphagia due to cervical plate

The aim of management of injury of the spinal cord, if feasible, is to reduce the occuring neurologic deficit and protect any additional loss of neurologic function. Most of complications are noted during the peroperative or immediate postoperative period. Dysphagia is common occurance in the early postoperative period following anterior cervical spine surgery. There are many reasons that lead to post-operative swallowing dysfunction. Delayed perforation of the esophagus has been reported rarely in the English literature. We describe a paraplegic patient who presented with progressif dysphagia secondary to esophageal perforation due to cervical instrumentation. A 24-year-old paraplegic patient was referred from neurosurgery department with the complaint of progressive dysphagia. Patient had an anterior cervical spine surgery with plate fixation due to cervical spine instability from motor-vehicle accident eight years previously. At the computerised tomography prevertebral implant was displaced and the esophagus was pushed forward with narrowing the lumen at the level of cricoid cartilage. A metal implant material that had perforated the esaphageal wall and protruded into the lumen was observed in the upper esophagus at the gastroscopy. Removal of the instrument with primary closure of the esophageal perforation was performed, and dysphagia was resolved postoperatively. Post-operative dysphagia is a common complication of anterior cervical spine surgery. Trauma to the adjacent nerves (e.g. glossopharyngeal nerve, hypoglossal nerve, recurrent laryngeal nerve and vagus nerve) due to surgical manipulation with prevertebral soft tissue swelling and postoperative fibrosis causes decreased pharyngeal wall movement, incomplete epiglottic deflection, impaired upper esophageal sphincter opening with adhesion formations at the vallecular and pyriform sinuses (1-3). If dyspagia is seen at the early postoperative period, fever may or may not accompany this symptom, prevertebral abscess should be considered (4). Perforation also can be ocur associated with an vertebral osteomyelitis (5). Sometimes screws are not found during the operation and is visualize after surgery by abdominal radiography in the abdomen. Microperforation of the esophageal wall may lead to a persistant fistula in patients who underwent anterior cervical surgery. Although postoperative dysphagia due to aferomentioned causes is common following anterior cervical spine surgery, delayed perforation of the esophagus by cervical implant can rarely be the underlying disease mechanism. In conclusion, it must be considered in the differential diagnosis and approached accordingly.

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