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Swallowing difficulty caused by neck laceration on suicide attempt

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Introduction

Normal deglutition requires a complex and coordinated interaction of the head and neck structures. Abnormalities and disorders of oropharyngeal anatomy and physiology at any level will lead to some perceptible dysphagia. The dynamic nature of swallowing requires the mobility of structures. Laryngeal elevation and pharyngeal contraction occur during a normal swallow. Limitation or impairment of mobility leads to dysphagia. The presence of a tracheostomy, scarring, fibrosis, and muscle injury can impede normal movement and result in dysphagia. Here we report a patient with dysphagia after direct neck laceration caused by attempted suicide with a knife.

Care report

A 53-year-old man visited an emergency room with right lateral neck laceration due to a suicide attempt. He received emergency surgery. Thyroid cartilage was exposed during the surgery, but there was no anterior laryngeal wall injury or penetration wound. Muscle repair and tracheostomy were done. After the transfer from intensive care unit to general ward, water intake was found to be difficult, and the patient was referred to the Rehabilitation Medicine Department for the evaluation of dysphagia. On videofluoroscopic swallowing study (VFSS), there were no particular findings on the oral and esophageal phases. On the pharyngeal phase, Grade 2 residue was observed in vallecular and right pyriform sinus. On attempt to swallow liquid and thick liquid, supraglottic penetration was shown. During a soft blended diet, subglottic aspiration was observed. Nasogastric feeding was recommended, and the head turning to the right side during swallow was trained. Effortful swallowing, isometric lingual exercise, Shaker's exercise, and pharyngeal electrical stimulation were also performed. On VFSS after 1 week, a residue of right pyriform sinus decreased somewhat, aspiration was observed only in liquid diet. Nasogastric tube was removed and dysphagia diet was tried. There were no particular problems after oral feeding.

Conclusion

During a normal swallow, there is a complex coordination of nearly all oral, pharyngeal and laryngeal muscles, and sensory surfaces in these regions. When a direct injury affects any of these sites or structures, the orchestration breaks down, and the result will be dysphagia. Although sometimes treatment options are limited, a proper diagnosis can guide therapy and assist the patient in understanding the etiology of the problem. It is important to conduct VFSS to check dysphagia if there is a direct neck trauma. It can also assist in the prevention of malnutrition and possible life-threatening pneumonia.

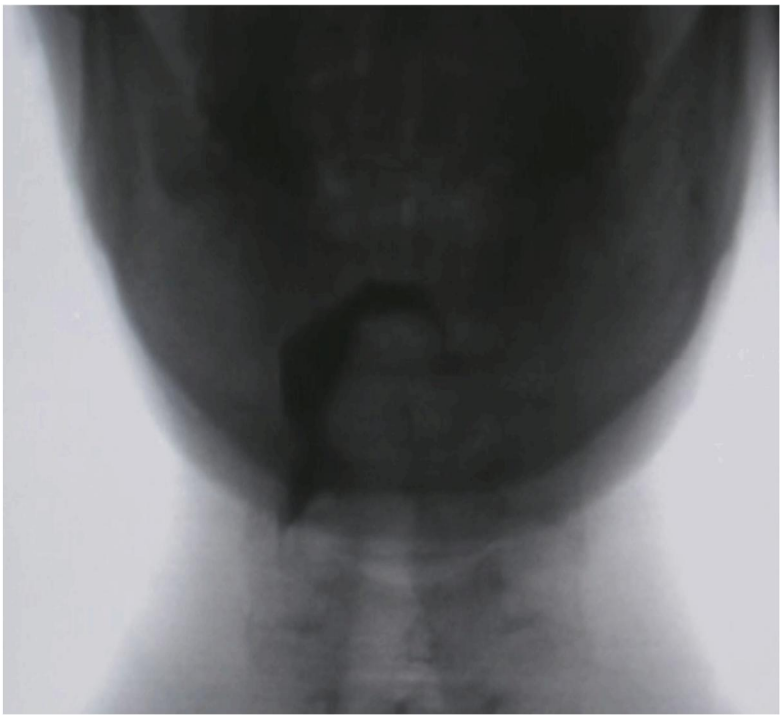

fig. A residue in the right pyriform sinus on videofluoroscopic swallowing study.