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Acute bilateral parotid gland swelling after endoscopy

Endoskopi sonrasında gelişen akut bilateral parotis bezi şişmesi

To the Editor,

Swelling of the salivary glands is a rare complication of upper gastrointestinal (GI) endoscopy. It may cause anxiety for both the patient and physician; however, it is generally benign, transient and painless, and requires no specific treatment (1). We report here a case of acute bilateral transient parotid gland swelling after upper GI endoscopy.

A 50-year-old female was admitted to the gastroenterology clinic with dyspeptic complaints, and upper GI endoscopy was performed. Topical pharyngeal anesthesia with lidocaine spray was performed before the procedure. Esophagitis and antral gastritis were detected on endoscopic examination. The patient coughed excessively and strained during the procedure. Immediately after the procedure, manifest swelling developed at both parotid gland localizations. Stiffness and mild tenderness were detected on palpation. Dyspnea and cyanosis were not observed. This condition was considered bilateral parotid gland swelling on examination by an otorhinolaryngologist. The swelling gradually decreased over a 45-minute period and had completely subsided 2 hours after the procedure without any medication.

This rare condition has been reported before as a complication of flexible upper GI endoscopy (1), bronchoscopy (2) and endotracheal intubation for anesthesia (3,4). Generally, parotid and submandibular glands are involved, and the condition may be unilateral or bilateral. The exact mechanism is not fully understood, but several possible mechanisms have been proposed in the etiopathogenesis. Some authors have concluded that it may be due to an adverse drug reaction such as to atropine or suxamethonium (3,5); however, no common drug has been used in all of the reported cases. Matsuki et al. (4) and Attas et al. (5) proposed that coughing and straining could produce slight swelling and may lead to venous congestion of the salivary glands. Couper (6) reported that manipulation of the head during endoscopy may lead to obstruction of the thoracic inlet venous drainage with subsequent congestion of the parotid glands. Finally, Bonchek (3) and Strowbridge (7) considered the most likely explanation to be that instrumentation of the upper airway or esophagus stimulates a reflex arc, with the afferent stimulus coming from the tongue, mouth or pharynx, and intense parasympathetic stimulation resulting in vasodilation and transient enlargement of the glands.

This rare complication of upper GI endoscopy should be kept in mind during and after the procedure, and it should be known that it is a benign and transient condition. No specific medication is required.

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Safety and tolerability of BRAVO capsule pH monitoring

BRAVO kapsül pHmetri yönteminin güvenlik ve uygulanabilirliği

To the Editor,

Ambulatory pH monitoring is a valuable tool in the diagnosis and management of gastroesophageal reflux disease. Catheter-based pH monitoring is the traditional method for this test, but patient discomfort is not uncommon. Recently, placement of a BRAVO pH capsule is being used as a fast and relatively comfortable alternative method (1,2).

In the gastroenterology unit of Kent Hospital, BRAVO capsule pHmetry was performed in 64 patients (37 male, 27 female; mean age: 37.9 (25-58) years) during the period 2006 - 2010. Indications for pH testing were preoperative evaluation in 17 patients, evaluation of atypical reflux symptoms in 40 patients and "other" in the remaining patients.

The capsule pHmetry system consists of a delivery system, a vacuum pump, the receiver, and the pH capsule. The receiver should be powered by long-life lithium batteries considering that the measurement lasts for 48 hours. Before placing the capsule, calibration is completed as directed by steps displayed on the screen of the receiver.

An upper gastrointestinal (GI) endoscopy under midazolam sedation is performed first, and the exact distance of the squamocolumnar junction is measured. Then, the delivery system is introduced and the capsule is placed with the vacuum force of 510 mmHg for 30 seconds, 6 cm above the squamocolumnar junction.

After the recovery, the patient is instructed to fill the diary, to keep the receiver on the belt attached to the body during the daytime (and a maximum 2-3 meters apart while sleeping), for the following 48 hours. The patient is informed to consume a normal diet, including the foods that provoke symptoms, and to undertake usual daily activities including any sporting activities that can be performed while carrying the receiver on the belt. It is also mentioned that some discomfort may be felt in the retrosternal region for the following 24 hours, for which diclofenac 50 mg is prescribed, and the patients are told to take one tablet in the event of severe pain.

The study was successfully completed in 62 patients. In 2 patients, an early fall on to the stomach –in 6 hours- caused failure of the procedure. All of the patients were questioned regarding the presence of pain or discomfort at the end of the second day. Eleven patients experienced mild to moderate retrosternal pain or discomfort, but only 3 of them took diclofenac tablets. No limitation of eating or swallowing was observed in any patient, and there was no need for early removal of the capsule endoscopically in any patient.

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