

CASE REPORT

Opening a Sealed Peptic Ulcer During Endoscopic Sphincterotomy

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ABSTRACT

Perforation during endoscopic sphincterotomy is a well-known complication, and it is almost always retroperitoneal. Intraoperative perforation after the procedure is very rare and has been reported in unusual cases. We report a peptic ulcer perforation during the endoscopic retrograde cholangiopancreatography.

Key words: Peptic ulcer perforation, Endoscopic sphincterotomy

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ÖZET

Endoskopik Sfinkterotomi Sırasında Açılan Peptik Ülser

Endoskopik sfinkterotomi sırasında perforasyon olması iyi bilinen bir komplikasyon olup hemen hemen daima retroperitoneal yerleşimlidir. İşlem sonrasında intraperitoneal bir perforasyon oldukça nadir görülmekte ve bu konuda az sayıda olgu yayımlanmıştır. Bu nedenle endoskopik retrograd kolanjiyopankreatografi sırasında gelişen bir peptik ulkus perforasyonu olgusunu sunmaktayız.

Anahtar kelimeler: Peptik ulkus perforasyonu, Endoskopik sfinkterotomi

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CASE REPORT

A 61-year-old male with upper abdominal pain and obstructive jaundice was admitted to our emergency department. Endoscopic retrograde cholangiopancreatography was performed and a biliary stent was introduced into the common biliary duct for a suspected malignant biliary stricture (Figure 1). No additional pathology was detected on endoscopic retrograde cholangiopancreatography. Six hours after the procedure, abdominal distension and dyspnea developed, and computed tomography scan showed pneumoperitoneum and extravasation of the oral contrast medium (Figure 2). Laparotomy was carried out and a duodenal ulcer on the bulbus, which had been perforated and penetrated to the corpus of the gallbladder, was identified. On surgical exploration, fibrinous exudate in the foramen of Winslow and paracolic region was detected, but there was no sign of retroperitoneal free air or bile. The ulcer was dissected from the gallbladder and repaired by Graham patch procedure.

DISCUSSION

Perforation during endoscopic sphincterotomy is a well-known complication, and it is almost always retroperitoneal^[1]. It may cause well-recognized symptoms of retroperitoneal air and occasionally subcutaneous emphysema. However, intraperitoneal perforation after the procedure is

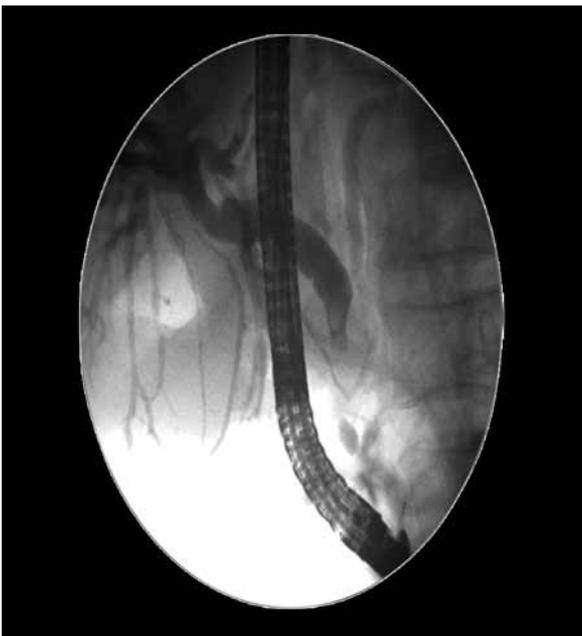


Figure 1. Cholangiography.

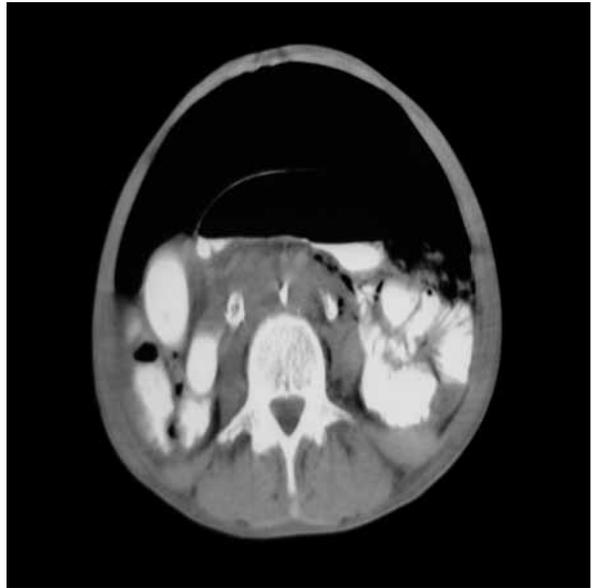


Figure 2. Free intraperitoneal air seen abdominal computed tomography scanning with no extravasation and air in retroperitoneum.

very rare and has been reported only in unusual cases^[2]. In the presented patient, perforation occurred at the site of the duodenal ulcer on the anterior wall of the bulbus, not on the sphincterotomy, but it was undetectable by the endoscopist during the procedure. The manipulation of the endoscope and air insufflation probably led to opening of the sealed ulcer (Figure 3). Air passed into the peritoneum and abdominal distension developed progressively in 6-8 hours.

Any procedure has both limitations and potential complications, and endoscopic retrograde cholangiopancreatography is no exception. Before performing therapeutic endoscopic retrograde cholangiopancreatography in a patient with signs of concomitant addi-



Figure 3. The opening of the sealed duodenal ulcer shown by tip of the clamp.

tional gastrointestinal disorders, such as penetrating duodenal ulcer or gastric cancer, etc., conventional gastroduodenoscopy should be performed in order to not overlook this situation.

REFERENCES

1. Morley AP, Lau JY, Young RJ. *Tension pneumothorax complicating a perforation of a duodenal ulcer during ERCP with endoscopic sphincterotomy. Endoscopy* 1997; 29: 332.

2. Avgerinos DV, Llagun OH, Lo AY, Voli J, Leitman IM. *Management of endoscopic retrograde cholangiopancreatography: related duodenal perforations. Surg Endosc* 2009; 23: 833-838.

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