消化性潰瘍穿孔の治療

Kashiwazaki General Hospital and
Medical Center, Department of Surgery
Kyo Ueki

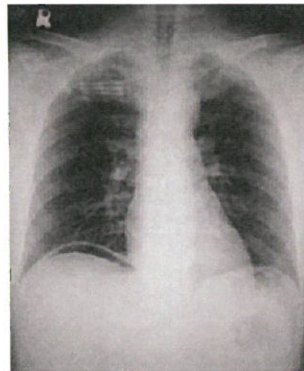
Complication of PUD

- **INTRODUCTION** — Complications of peptic ulcer disease (PUD) include bleeding, perforation, penetration, and gastric outlet obstruction. With time, there have been major shifts in the etiologies of complicated peptic ulcers and in the affected patient populations. In addition, management has undergone dramatic changes. Management now includes the early use of high-dose intravenous proton pump inhibitors (PPIs), treatment to eradicate Helicobacter pylori (H. pylori), improved endoscopic methods for control of hemorrhage, and changes in surgical indications and procedures.

Quote from UpToDate

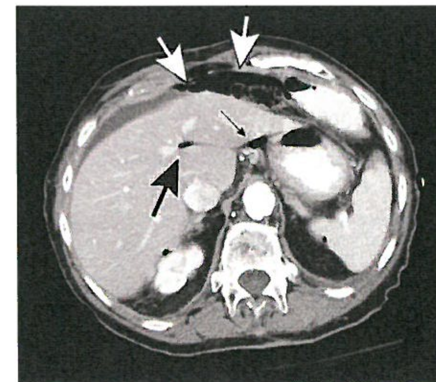
Diagnosis of perforation

- **Diagnosis** — Rapid diagnosis is essential, since the prognosis is excellent within the first six hours, but deteriorates with more than a 12-hour delay [50,73]. Perforation is largely a clinical diagnosis with the history and physical examination providing essential clues (see 'Clinical manifestations' above).
- If imaging is required, plain x-rays are typically obtained first. Careful interpretation of upright chest and abdominal films can detect diagnostic free air in many cases of perforated gastric and duodenal ulcers [76].

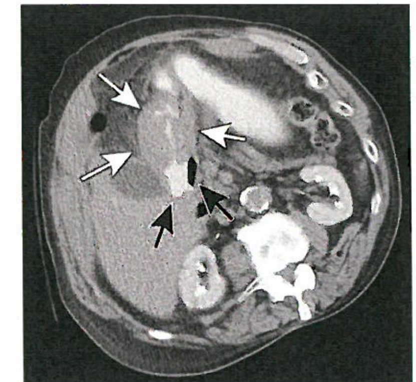


Quote from UpToDate

The presence of free air on abdominal imaging is highly indicative of a perforated viscus.



free air (arrows)

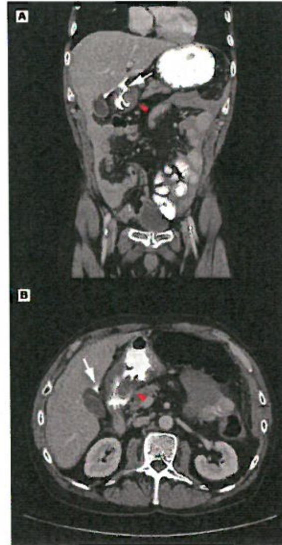


thickening and inflammation of the duodenal wall (white arrows) and air (black arrows)

Quote from UpToDate

Oral contrast

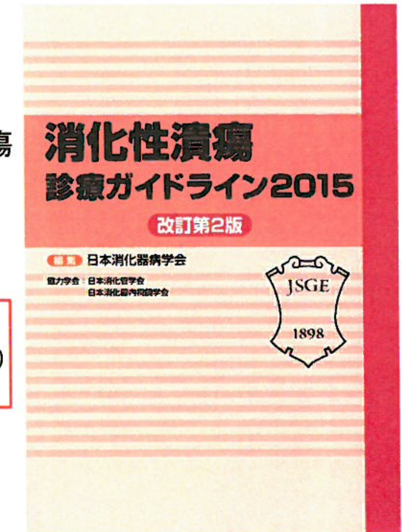
- The presence of free air on abdominal imaging is highly indicative of a perforated viscus (image 1 and image 2 and image 3), although about 10 to 20 percent of patients with a perforated duodenal ulcer will not have free air [76]. If free air is found, no other diagnostic studies are necessary. Leakage of water soluble oral contrast may be useful in selected cases. Once the oral contrast is given, the patient should be rotated 360 degrees and placed on the right side to fill the antrum and duodenum with contrast. However, many perforations have already sealed spontaneously by the time of presentation [77], so the absence of a leak does not exclude the diagnosis of a perforated ulcer.



Quote from UpToDate

日本のガイドライン

第1章　出血性胃潰瘍・出血性十二指腸潰瘍
第2章　H.pylori除菌治療
第3章　非除菌治療
第4章　薬物性潰瘍
第5章　非H.pylori・非NSAIDs潰瘍
第6章　外科的治療
第7章　穿孔・潰瘍に対する内科的（保存的）治療



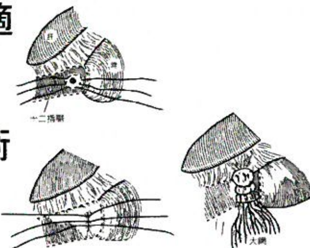
第6章　外科的治療

CQ6-1　消化性潰瘍穿孔の手術適応は？

①発症後時間経過が長い時、腹膜炎が上腹部に限局しないとき、腹水が多量であるとき、胃内容が大量にあるときは、早期の手術を推奨する。Ev-B
②年齢が70歳以上であるとき、重篤な併存疾患があるとき、血行動態が安定しないときは、早期の手術を推奨する。Ev-C

CQ6-3　消化性潰瘍穿孔に対する最適な手術術式は？

胃・十二指腸潰瘍に対し推奨される術式は腹腔洗浄ドレナージ＋穿孔部閉鎖＋大網被覆を推奨する。Ev-A



第7章　内科的（保存的）治療

CQ7-1　穿孔に対する内科的治療の適応は？

- 適応として程度の軽い限局性腹膜炎が提案される。具体的な判断基準としては、24時間以内の発症、空腹時の発症、重篤な合併症がなく全身状態が安定、腹膜刺激症状が上腹部に限局、腹水貯留が少量の場合などである。Ev-D
- 70歳を超える高齢者では外科的手術が優先することを提案する。Ev-C

CQ7-2　穿孔に対する内科的治療はどのように行うべきか？

- 絶飲食、補液、経鼻胃管留置、抗菌薬およびH2RAまたはPPIの静脈投与を行うことを提案する。Ev-D

CQ7-3　内科的治療から外科的治療に移行するタイミングは？

- 24時間経過しても、臨床所見、画像所見が改善しない場合に外科的治療を行う事を提案する。Ev-D

Operative versus nonoperative management

- The management of patients with small to moderate leaks who are clinically stable is less clear. Currently, the standard of care for such patients is surgery, but some studies suggest that these patients can be managed nonoperatively.

Quote from UpToDate

Studies

●The efficacy of initial conservative therapy with a nasogastric tube, antibiotics, and H2 blockers was compared with immediate laparoscopic surgical repair in a randomized trial of 83 patients with a perforated peptic ulcer [84]. Surgery was required in 11 of 40 patients (28 percent) in the conservative therapy group because of failure to improve clinically after 12 hours. The other 29 patients in the conservative therapy arm were successfully managed without surgery. The two groups did not differ significantly in terms of morbidity or mortality. However, the hospital stay was 35 percent longer in the group treated conservatively. Also, patients over 70 years old were less likely to respond to conservative treatment. The authors concluded that an initial period of nonoperative treatment with careful observation was safe in patients under age 70 years.

- N Engl J Med. 1989;320(15):970. Chinese University of Hong Kong, Shatin

●A prospective study of 82 patients with perforated peptic ulcers treated patients with nasogastric suction and intravenous H2 receptor antagonists [85]. If patients did not show clinical improvement after 24 hours, surgery was performed. With this approach, surgery was avoided in 44 patients (54 percent). Factors associated with surgery included the size of the pneumoperitoneum, abdominal distension, heart rate >94 beats per minute, pain on digital rectal examination, and age >59 years. Overall mortality in the study was 1 percent.

- Ann Chir. 2004;129(10):578. France

Quote from UpToDate

Perforated gastric ulcer

- — Because patients with perforated gastric ulcer tend to be older adults and have comorbidities, surgery is associated with high overall mortality (ranging from 10 to 40 percent) regardless of treatment [26,57-60].
- The choice of procedure is usually made during the operation. The preferred approach is partial gastrectomy to include the ulcer because of the risk of gastric malignancy, unless the patient is at an unacceptably high risk because of advanced age, comorbid disease, intraoperative instability, or severe peritoneal soilage [60]. Patch closure alone is associated with postoperative gastric obstruction in approximately 15 percent of cases. When patch closure is performed, biopsy of the ulcer is necessary to rule out malignancy [60].

Quote from UpToDate

結語

上部消化管穿孔において、70歳以下で程度の軽い腹膜炎患者に対し非手術療法が提案されている。