

- (10) Van Leeuwen P, Bröcker JSH, Bax NMA, Molenaar JC: The effect of cimetidine on a bleeding peptic ulcer due to a gastrojejunostomy for duodenal atresia. *J Ped Surg* 1981;16:204.  
 (11) Varsamidakis N, Davidson BR, Hobbs K: Duodeno-jejunal varicosities following extrahepatic portal vein thrombosis. *HPB Surg* 1992;5:147-153.  
 (12) Weber TR, Lewis JE, Mooney D, Connors R: Duodenal atresia: a comparison of techniques of repair. *J Ped Surg* 1986;21:1133-1136.

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## Invited Commentary to: "A Rare Cause of Upper Gastrointestinal Hemorrhage"

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Upper gastrointestinal bleeding is a serious emergency that accounts for approximately 1.2 annual hospital admissions per 1000. Up to the mid eighties the mortality associated with upper gastrointestinal hemorrhage was 10% but declined thereafter due to improved intensive care measures and endoscopic therapies (1, 2). The most common causes for upper gastrointestinal bleeding are esophageal varices and NSAID associated bleedings from gastroduodenal ulcers. Less frequent causes of upper gastrointestinal bleeding include hemobilia, Mallory Weiss tear, gastroduodenal arterial venous malformations, hemococcus pancreaticus but also bleeding from Zenker's diverticulum, and from (pseudo)aneurysms of the perigastric and periduodenal arteries (3, 4, 5).

Bischof and Wenzl describe a patient with recurrent bleeding from a gastroenteroanastomosis that had been performed 35 years prior to the bleeding event. Early postoperative bleeding from anastomotic sites are well known complications after gastrointestinal surgery and have been attributed to technical failure (6). Late bleeding after gastrointestinal surgery is a less frequent entity that has however been reported after small bowel resection in children, as well as after intestinal resection for perforated necrotizing enterocolitis (7, 8).

Since all available literature on that subject is anecdotal, it is difficult to validate the late bleeding and occurrence of anastomotic ulcers in pathogenetic terms.

In other words, does the ulcer just by chance occur in that patient and at that side, or is an anastomosis performed 30 years earlier the cause for that ulcer, and furthermore, is „non optimal neonatal surgery“ the cause for that ulcer?

There are no reports in the literature that would support that connection after that long period of time.

While a Braun's anastomosis performed at the time of first surgery might have avoided the biliary reflux, the question whether in a 35-year old patient a proper re-do posterior gastroenterostomy with Braun's anastomosis would have been the better long term procedure rather than resecting parts of the stomach, and subject the patient to a potential risk for an anastomotic malignancy after partial gastric resection remains to be answered.

### Literatur

- (1) Kankaria AG, Fleischer DE: The critical care management of nonvariceal upper gastrointestinal bleeding. *Crit Care Clin* 1995;11:347-368.  
 (2) McGuirk TD, Coyle WJ: Upper gastrointestinal tract bleeding. *Emerg Med Clin North Am* 1996;14:523-545.  
 (3) Katz PO, Salas L: Less frequent causes of upper gastrointestinal bleeding. *Gastroenterol Clin North Am* 1993;22:875-889.  
 (4) Risti B, Marinček B, Jost R, Decurtins M, Ammann R: Hemococcus pancreaticus as a source of obscure upper gastrointestinal bleeding: three cases and literature review. *Am J Gastroenterol* 1995;90:1878-1880.  
 (5) Kensing KP, White JG, Korompai F, Dyck WP: Massive bleeding from a Zenker's diverticulum: case report and review of the literature. *South Med J* 1994;87:1003-1004.  
 (6) Fischer MG: Bleeding from stapler anastomosis. *Am J Surg* 1976;131:745-747.  
 (7) Bhargava SA, Putnam PE, Kocoshis SA: Gastrointestinal bleeding due to delayed perianastomotic ulceration in children. *Am J Gastroenterol* 1995;90:807-809.

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## Eingeladener Kommentar zu: „A Rare Cause of Upper Gastrointestinal Hemorrhage“

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Die erste erfolgreiche Operation einer Duodenalatesie wurde bereits 1905 von Vidal (4) in Frankreich durchgeführt. Er hatte eine Gastrojejunostomie zur Umgehung des Hindernisses angelegt. Aber schon 1916 wurde von Ernst (2) eine Duodenojejunostomie vorgenommen, weil offensichtlich schon damals die Spätfolgen einer Gastrojejunostomie bekannt waren. Bei diesem 1965 geborenen und operierten Kind wurden die Prinzipien der regulären Operation eines Duodenalverschlusses mißachtet, wodurch sich als eine der Spätkomplikationen eine gastrointestinale Blutung manifestiert hat (3).

Die vom Autor (1) gewählte Korrekturoperation hat bei dieser Patientin zu einem Teilverlust des Magens geführt, einer Billroth-II-Operation mit dem Folgerisiko, daß diese noch junge Frau wahrscheinlich ein Magenkarzinom erleben wird. Nach meiner Ansicht hätte bei dieser präpapillären Duodenalatesie idealerweise eine Duodeno-Duodenostomie mit Auflassung der Gastrojejunostomie oder zumindest eine Anastomose zwischen dem präatretischen Duodenum und dem Jejunum in Form einer Y-Roux-Schlinge wesentlich besser die physiologischen Verhältnisse wiederherstellen können als ein resezierender Mageneingriff.

Über Spätfolgen nach angeborenen Fehlbildungen des Gastrointestinaltraktes liegen nur wenige Berichte vor. Insofern ist diese Arbeit interessant und wichtig, weil Allgemeinchirurgen manchmal mit Spätkomplikationen kongenitaler Fehlbildungen zu rechnen haben.

### Literatur

- (1) Bischof G, Wenzl E: Case Report: A Rare Cause of Upper Gastrointestinal Hemorrhage. *Acta Chir Austriaca* 1999;31:189-191.  
 (2) Ernst CH: Congenital atresia of the duodenum. *Br med J* 1916;1:644.  
 (3) Horcher E: Komplikationen bei Duodenalatesie, Duodenalstenose und Pankreas annulare. In Schärli AF (ed): *Komplikationen in der Kinderchirurgie*. Stuttgart-New York, Thieme, 1991.  
 (4) Vidal E: 18. *Congres de Chirurgie*, Paris, Procès verbaux, Mémoires et discussion. *Ass franc Chir* 1905;18:739.

### Closing Remarks

It is certainly difficult to evaluate the occurrence of anastomotic ulcers and the recurrent bleeding after such a long period of time in pathogenetic terms. From the few reports in the literature (cited above) and from the history of our patient it appears, though, that these patients obviously tolerate quite severe chronic inflammation for years without medical help.

The reason why we choose to perform a resective procedure in our patient was the fact that recurrent bleeding from anastomotic ulceration had occurred. Otherwise duodeno-duodenostomy or duodenojejunostomy would certainly have been the appropriate operation.

Lastly, we feel that the discussion on the development of gastric stump carcinoma is still open. Several recent epidemiological studies have failed to demonstrate an increased risk of gastric cancer after peptic ulcer surgery when compared to the incidence in the total population (1, 2, 3).

### Literatur

- (1) Schafer LW, Larson DE, Melton LJ, Higgins JA, Ilstrup DM: The risk of gastric carcinoma after surgical treatment for benign ulcer disease. A population-based study in Olmsted County, Minnesota. *N Engl J Med* 1983;309:1210-1213.  
 (2) Fischer AB, Graem N, Jensen OM: Risk of gastric cancer after Billroth II resection for duodenal ulcer. *Br J Surg* 1983;70:552-554.  
 (3) Luukkonen P, Kalima T, Kivilaakso E: Decreased risk of gastric stump carcinoma after partial gastrectomy supplemented with bile diversion. *Hepatogastroenterology* 1990;37:171-173.

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