One hundred and seven consecutive patients treated for EA Gross type C over 20 years (1990-2010) were included in the study. Median birth weight was 2600 g, median gestational age was 38 weeks and mean follow-up was 3.5 years. Seventy-three had an attempted extrapleural repair, 23 with pleural breach, 6 (8%) with intraoperative drain. Thirty-four had a transpleural approach, and 5 (15%) had a drain. In 2 cases only a clinical indication (preoperative perforation of the upper pouch, bulla of the middle lobe of lung) could be found. Patients with anastomosis under tension were paralyzed and ventilated for 5 days. All drains were removed within 48 hrs. Transanastomotic feeding was started at day 1-2 without routinely performed contrast study, oral feeds from day 3. 2 patients without initial drain required postoperative intervention for pneumothorax and anastomotic leak (with later operative repair). Twenty-five patients needed serial endoscopic dilatations for strictures with only one requiring open operative management.

The authors assume that elective drain placement is not beneficial. The esophageal leak was obvious after 48 hrs and the drain by then would have been removed. A former randomized study is cited even showing no benefit of a drain, and intraoperative drains seem unlikely to be sufficient for adequate drainage of leaks in another paper. Therefore, the conclusion on the basis of more than 100 cases is that the risk of anastomotic leak or pneumothorax is low and elective drain placement is neither necessary nor beneficial.—P. Schmittenbecher

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Redo esophageal surgery: The diagnosis and management of recurrent tracheoesophageal fistula

This article presents a 30-year review of 38 recurrent tracheoesophageal fistulas. The initial 26 cases were presented in 2009 at the annual meeting of the British Association of Pediatric Surgeons and the European Association of Pediatric Surgeons Joint Conference and published in the Journal of Pediatric Surgery (Bruchet et al. J Pediatr Surg 45:337–340, 2010). In the initial cohort of 26 patients, 18 had a leak after their primary operation and 22 had respiratory symptoms leading to the discovery of the recurrent fistula. The diagnosis was made by a contrast study in 24. The repairs entailed replacing a catheter through the fistula, separating the trachea and esophagus completely using sharp dissection and placing vascularized tissue, either pleura or pericardium between the suture lines. Postoperative complications included seven anastomotic leaks, four strictures and three recurrent fistulas. Long-term follow-up (median of 84 months) showed that 21 took all of their nutrition by mouth, three were tube fed and two required a combination of both. Of the 23 patients with growth chart data, 16 fell into the first quartile of the growth chart, whereas none fell between the 75th and 100th percentile. In conclusion, this initial series of 26 patients along with the updated additional series of 12 patients is the largest series thus far reported in the literature. All 38 patients represent the characteristics of recurrent tracheoesophageal fistulas, including techniques to make the diagnosis and to provide a secure closure of the fistula, and the long-term outcomes of these patients.—Federico G. Seifarth

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Laparoscopy-assisted percutaneous endoscopic gastrostomy enables enteral nutrition even in patients with distorted anatomy

Authors performed laparoscopy-assisted PEG placement in twelve patients (seven females, five males; six children, six young adults; mean age 19.2 years) with cerebral palsy, spastic quadriplegia, severe kyphoscoliosis and interposed organs. All patients required enteral nutrition (EN) due to starvation, and standard PEG placement was impossible due to distorted anatomy. An attempt of the laparoscopy-assisted PEG was made to avoid a necessary surgical gastrostomy. In all twelve patients the laparoscopy-assisted PEG was successful, and EN was introduced four to six hours later. There were no complications in the perioperative period. All patients were discharged from the hospital on full gastrostomy feedings. In the authors’ opinion laparoscopy-assisted PEG is an advantageous alternative to surgical gastrostomy in patients with distorted anatomy.—Jerzy K. Niedzielski

http://dx.doi.org/10.1016/j.jpedsurg.2014.02.030

Non-transplant surgery for short bowel syndrome

The goal of any treatment programme for short bowel syndrome SBS is to achieve nutritional enteral autonomy. This must begin with conservation of as much bowel as possible from the time of first presentation. Frequent causes of the short bowel syndrome are intestinal atresia, necrotizing enterocolitis, midgut volvulus, extended intestinal aganglionicism, ‘vanished gut’ often associated with gastroschisis and occasionally catastrophic trauma. Atresia is more amenable to successful surgery than other causes, except when associated with gastroschisis. Intrinsic dysmotility has a poor prognosis. Intestinal lengthening procedures are only indicated if there is sufficient bowel dilatation. Extended intestinal aganglionicism is rarely amenable to any form of non-transplant surgery. Options available are to conserve bowel, close stomas early (use all available bowel to the maximum or even re-feed stoma effluent into the distal unused bowel), release adhesions causing obstruction, resect strictures, taper or excise localized dilatations and finally address dilated bowel with lengthening and tailoring operations. These procedures aim to improve effective peristalsis, thereby reducing bacterial overgrowth and improving nutrient contact with enteral mucosa to maximize absorption and intestinal adaptation. The Bianchi longitudinal splicing operation and the serial transverse enteroplasty operations have stood the test of time in providing considerable improvement in enteral nutritional autonomy in around 60% of cases. In SBS without dilatation attempts at ‘mechanically’ delaying transit (nipple valves, reversed bowel segments, colon interposition) have had inconsistent outcomes. Growing neomucosa and lengthening bowel by longitudinal stretch are still experimental.—Federico G. Seifarth

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Abdomen

Multicenter randomized trial of postoperative corticosteroid therapy for biliary atresia

This article of the Japanese Biliary Atresia Society aims to evaluate early response to two different corticosteroids doses after Kasai portoenterostomy for biliary atresia (BA).

A prospective, randomized trial was performed in infants from the nationwide BA registry with type 3 BA. Sixty-nine infants were randomized to receive either 4 mg/kg/day (group A, n = 35) or 2 mg/kg/day prednisolone (group B, n = 34). The corticosteroids were