P329
The use of TEM-ESD for massive rectal adenoma in a 23-h day-case setting

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Aim: Trans-anal-endoscopic-microsurgery (TEM) been well described as a safe alternative to radical surgery in resection of benign rectal tumours. Previously full-thickness approach has been reported. We investigated the use of Waterjet-based-TEM-electrosurgical-resection (ESR) using ERBEJET for sub-mucosal-excision.
Method: Retrospective review of TEM-ESR procedures covering a two year period for massive-rectal-adenomas. Techniques, completeness of excision, safety and efficacy was analysed.
Results: Thirteen TEM-ESR-resections. All patients were discharged within 23 h, with no 30 day readmissions. In one patient, complete excision could not be assessed due to partially fragmented specimen, in all other cases histologically complete resection was shown. All resections were histologically proven to be sub-mucosal with minimal extension to muscularis-propria allowing full staging of submucosa. Two patients had repeated endoscopy and biopsy for granulation with no recurrence.
Conclusion: We have demonstrated TEM-ESR to be a safe, well tolerated technique for sub-mucosal en-bloc resection of benign rectal tumours. It allows complete excision of rectal polyps in a single procedure without the need for repeated resection. Safely performed in a 23-h day-case setting. This technique prevents the inflammatory reactions in the rectal mesocolon seen in full thickness resections, which is detrimental to a radical surgery if adenocarcinoma is seen in the specimen.

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The effect of human amniotic membrane on colorectal anastomosis in cases with neo-adjuvant radiotherapy: an experimental animal study

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Aim: Diverting loop ileostomy has been usually performed after colorectal anastomosis in cases of colorectal cancer with history of neo-adjuvant radiotherapy to decrease the chance of leakage. Considering the side effects of diverting loop ileostomy, the objective of present study is the investigation of the effect of Human Amniotic Membrane (HAM) on colorectal anastomosis leakage after neo-adjuvant radiotherapy.
Method: In this prospective animal study, 20 cross-breed rabbits with the age of 6–8 months and weighting of 2–2.5 kg were randomly divided into two groups after receiving equal dose of radiation. 4 weeks after radiation, resection of 4 cm of colorectal segment and end-to-end single layer anastomosis were conducted.
Results: All 13 rabbits in treatment group were survived after 8 weeks and no leakage was found. In control group 5 rabbits expired in <1 week after operation because of peritonitis due to anastomosis leakage. Also, pathologic evaluation revealed significant epithelialization and neovascularization in case group. Statistically healing score was higher in HAM group compared with controls.
Conclusion: Owing to the role of HAM in protection of colorectal anastomosis after radiation, we conclude that this approach is a feasible technique instead of diverting loop ileostomy.

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Laparoscopic mobilisation of a rectus abdominis myofascial flap for the prevention of perineal hernias post abdominoperineal resection of the rectum – a feasibility study

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Aim: Perineal hernias following abdominoperineal resection of the rectum (APR) are rare but remain challenging. We propose that a laparoscopically mobilised rectus abdominus, myofascial flap could be performed at the APR to reduce the likelihood of a perineal hernia.
Method: A laparoscopic dissection of the right rectus abdominis muscle was undertaken in a human cadaver. The right rectus abdominis and posterior rectus sheath were dissected out, preserving anterior sheath and inferior epigastric pedicle. Using additional ports in the left flank and colostomy site, an incision from the uppermost tendinous intersection was made to the level of the superior pubic ramus. The muscle was mobilised medially to laterally, and the lateral aspect of the posterior sheath divided. The superior aspect was then divided.
Results: A 16 cm long muscle flap with intact posterior sheath was achieved and tunneled through a window in the broad ligament, reaching the pelvic floor. This could then be sutured to the defect in the pelvic diaphragm left after APR.
Conclusion: This technique should be further investigated in patients undergoing APR for prophylaxis of perineal hernias. Advantages include, avoiding prosthetic material, laparotomy and technical challenges of the I-GAP flap. We are seeking institutional approval to undertake this in a cohort of patients.

P332
Experience in treatment of congenital intestinal angiodysplasia

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Aim: To improve results of treatment for congenital intestinal angiodysplasia.
Method and Results: Fifty-six patients were treated from 1995 to 2015. Duration of disease prior to diagnosis was 2–20 years. Thirty-two subjects (64%) were previously treated surgically with haemorrhoidectomy, ligation of internal haemorrhoids, transanal resection, electrocoagulation and other operations. Indications for surgery were: diffuse involvement of >5 cm of colon, daily blood loss >30 ml and marked homeostasis disturbance. Radical operation was performed in 40 (71, 4%) patients. In 92, 8% rectal lesions were found leading to abdominoanal resection in 70% cases. In 15% abdominoanal resection was combined with right-sided hemicolectomy and in 7% anterior rectal resection was performed. In 18 (45%) subjects rectal involvement was classified as extensive (>20 cm in diameter) and in 13 (32.5%) adjacent organs (vagina, bladder or pelvic walls) were involved. Some of combined operations were separated to several stages in cases of homeostatic disturbance, intraoperative blood loss >30 ml/kg body weight or fibrinolytic haemorrhage. Complications developed in 53.1% of observations. Mortality was 10%.
Conclusion: Surgical treatment aims to remove affected intestinal segments with mobilization of the rectum depending on local advancement, minimal traumatization of tissue and rigorous hemostasis.

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Treatment and Results of 697 Patients with chronic anal fissure

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Aim: To investigate the chronic anal fissure treatment.
Method: 697 patients presented with chronic anal fissure between 2005 and 2012. 44 patients underwent anal dilatation, 152 fissurectomy, and 501 lateral internal sphincterotomy.
Results: In the postoperative period, 24 (3,4%) patients experienced non-serious bleeding, while 16 (2,2%) developed urinary retention. Anal dilatation was performed in 10 (22,7%) patients, lateral internal sphincterotomy in 22 (4,4%) was seen in patients with transient incontinence. 27,2% in patients with anal dilatation in patients with fissurectomy up 14,4%. 1,6% recurrence was observed in patients who underwent lateral internal sphincterotomy.
Conclusion: These results are consistent with studies in the literature. Lateral internal sphincterotomy is an appropriate method of surgery in the treatment of chronic anal fissure.

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Which patients are the best candidates for the Karydakis Flap?

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Aim: Risk factors of wound complications were evaluated to find the best candidates for the Karydakis flap as a treatment for sacrococcygeal pilonidal disease (SPD).
Method: Prospective data on 179 patients underwent Karydakis flap from May 2007 to September 2014 were analysed. Patients were followed up for an average of 31.26 ± 21.80 months. Patients with and without wound complications were compared to find risk factors affecting wound complications.
Results: Age ranged 14–57 years and 84.4% were male. In general, 34 patients (19%) developed wound complications. Partial skin disruption and infection were the most common complications detected in 23 (12.8%) and 10 (5.6%) patients, respectively. Less common complications included hematoma (2 patients) and seroma (1 patient).

Significant relations was found between wound complications and history of previous SPD surgeries ($P = 0.003$), number of midline pits ($P = 0.005$), distance between cranial and caudal pits ($P = 0.005$), distance between last caudal pit and anal verge ($P = 0.000$), presence of lateral discharging sinus ($P = 0.039$). Age, sex, height, weight, BMI, smoking, and duration of symptoms didn't affect wound complications significantly.
Conclusion: More wound complications were happened in patients with history of previous SPD surgeries, numerous pits, low distance between caudal pit and anal verge, and presence of lateral discharging sinus.

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