

### SII13: LAPAROSCOPIC SUBTOTAL COLECTOMY WITH ILEORECTAL ANASTOMOSIS (IRA) IN TWO CHILDREN WITH FAMILIAL ADENOMATOUS POLYPOSIS (FAP)

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**Background** Familial adenomatous polyposis (FAP) is the most common inherited polyposis syndrome, characterized by the development of multiple colorectal adenomatous polyps. Colectomy is currently the only effective therapy, eliminating the inevitable risk of colorectal cancer (CRC) in those patients. Crucial considerations in the management of FAP are the timing and type of surgical intervention. Usually, surgery is undertaken in the late teens or early twenties. However, the increased safety and the availability of laparoscopic approach, combined with an increasing number of patients below the age of 10 years, presenting with symptomatic disease, cause earlier qualification for colectomy. Surgical options include restorative proctocolectomy with ileal pouch anal anastomosis (IPAA), and subtotal colectomy with ileo-rectal anastomosis (IRA). In comparison to IPAA, IRA procedure seems to offer a better functional outcome, and consequently, a better quality of life. In case of young women, the avoidance of the risk of fertility loss, connected with IPAA procedure (pelvic dissection), is especially worth emphasizing. The main drawback of subtotal colectomy with IRA is that adenomas and carcinomas can develop in the retained rectum, predominantly at the age of 35 - 50 years. Therefore careful follow up on a six monthly to annual basis is required.

**Materials and methods** A retrospective review of medical records of 2 patients with early presentation of FAP symptoms, treated with laparoscopic subtotal colectomy with IRA, in the Department of Pediatric Surgery, Jagiellonian University Medical College, in 2016.

**Results** Two girls at the age of 9 and 13, with confirmed FAP, underwent prophylactic laparoscopic subtotal colectomy with IRA between October 2015 and December 2016. In both cases, the procedure was performed with standard 4 port technique (one 10 mm port and three 5 mm ports). IRA was performed with 21 and 25 mm circular staplers. The operating time was 135 and 155 minutes. The postoperative hospital stay was 7 and 6 days. The duration of follow-up period is 13 and 6 months. There was no observed perioperative or postoperative complications. Endoscopic examination of the rectal stump with histopathological assessment of polyp biopsies, performed 6 months after the operation revealed a significant reduction of the number of polyps, without lesions greater than 2 mm or with high-grade dysplasia.

**Conclusions** Laparoscopic subtotal colectomy with IRA in chil-

dren with FAP, younger than 15 years of age is safe, feasible and offers quick recovery. Pediatric patients with FAP, qualified for prophylactic treatment with this method, should be offered laparoscopic surgery. Tentative results of endoscopic follow-up examinations of the rectal stump after IRA procedures are promising, requiring further careful surveillance.

**Key words** familial adenomatous polyposis, FAP, laparoscopy, IRA