and 77% ±10, respectively.
Conclusions. Near infrared hyperspectral imaging can discriminate tongue tumor tissue from healthy tongue muscle tissue in an *ex vivo* setting. Future work will firstly focus on increasing the data set to improve the results.
Conflict of interest: No conflict of interest.

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SHORT-TERM AND LONG-TERM OUTCOMES OF J-POUCH VS SIDE-TO-END VS END-TO-END COLORECTAL ANASTOMOSES AFTER TOTAL MESORECTAL EXCISION FOR RECTAL CARCINOMA: A RANDOMIZED TRIAL

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Background: randomized trial was conducted to analyze outcomes of different type colorectal anastomoses after low anterior resection for rectal carcinoma.
Method: From 2015 to 2017, patients with rectal carcinoma were randomized to J-pouch (JP), side-to-end (SE) and end-to-end (EE) anastomosis. Preventive ileo- or colostomy were formed in all the patients. Stoma closure was carried out in 2-6 month after surgery. Intraoperative peculiarities, postoperative complications rate, functional results and quality of life according to Wexner score, LARS score, FIQL were assessed in 3, 6, 12 months after surgery.
Results. 90 patients with rectal carcinoma T2-4N0-2M0 were randomized. In JP, 8 patients were withdrawn due to technical reasons, 7 converted to EE and 1 – to SE. One patient was converted from SE to EE group. As a result, 22 patients were recruited in the J-pouch group, 30 patients – in side-to-end anastomoses and 38 in end-to-end anastomoses group. Laparoscopic approach increases time of operation in comparison to open, irrespective on type of anastomosis (230 and 180 min, p=0.001). Postoperative complications developed in 13,6%, 16,7% and 34,2% in JP, SE and EE, respectively (p=0.705). Anastomosis leakage rate was similar (4,5%, 3,3% and 7,9%, accordingly, p>0.05).
Wexner, LARS score and "Coping / behavior" of FIQL at 3, 6 and 12 months showed significantly better results for J-pouch compare to SE and EE. In 12 months, there were no difference between SE and EE according to Wexner score and FIQL, but LARS score. SE showed tendency towards better results in comparison to EE.
With anorectal manometry, the maximum tolerated volume was significantly higher in 3, 6, 12 months in J-pouch vs SE and EE (160 vs 138 vs 121 (p <0.0001), 190 vs 169,5 vs 155 (p <0.0001), 223 vs 184 vs 168 ml (p <0.0001), respectively.
Conclusions. J-pouch shows better functional results in 3-12 months after surgery, albeit technically is more demanding. Side-to-end reconstruction also can be preferred.
Conflict of interest: No conflict of interest.

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WHOLE BLOOD GENE EXPRESSION PROFILING IN PATIENTS UNDERGOING COLON CANCER SURGERY IDENTIFIES DIFFERENTIAL EXPRESSION OF GENES INVOLVED IN IMMUNE SURVEILLANCE, INFLAMMATION AND CARCINOGENESIS

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Background. Surgery is included in any curative treatment strategy for solid cancers. Growing evidence supports that the stress, related to cancer surgery, might increase the risk of residual cancer in otherwise curatively treated cancer patients. The aim of this study was to identify changes in transcription of genes involved in immune surveillance, inflammation and carcinogenesis after surgery in a cohort of patients undergoing curatively intended laparoscopic colon-cancer surgery.
Material and methods. Patients undergoing elective, curatively intended laparoscopic surgery for colon cancer stage I-III UICC were included in the study. Patients followed standard of care. Whole blood gene expression profiling (WBGP) was performed on the day prior to surgery and 1, and 10-14 days after surgery. Samples were collected in Paxgene tubes and labeled cDNA was fragmented and hybridized to Affymetrix GeneChip™ 2.0. Results were corrected for multiple hypothesis testing using the false discovery rate. Pathway analysis was performed through the Molecular Signature Database. Paired fold changes of gene expression were calculated for post-operative compared to pre-operative samples.
Results. WBGP of 33,804 genes in 26 patients showed more than 6000 significantly differentially expressed genes between samples from the day prior to surgery and the day after surgery. Pathway gene enrichment analysis showed a downregulation of immunologically relevant pathways. There was a significant downregulation of genes involved in T-cell receptor signaling, antigen presentation, NK-cell activity and IFN-γ signaling after surgery. Furthermore, there was an upregulation of cytokines related to metastatic ability and growth.
Conclusion. Whole blood gene expression profiling revealed dysregulation of genes involved in immune surveillance, inflammation, and carcinogenesis after curatively intended laparoscopic colon cancer surgery.
Conflict of interest: No conflict of interest.

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RETURNS TO SURGERY AND FAILURE TO RESCUE AMONGST COLORECTAL CANCER PATIENTS FOLLOWING MAJOR RESECTIONAL PROCEDURES – THE PICTURE ACROSS ENGLAND 2009-2014

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Background. Major resectional surgery remains the mainstay of treatment for colorectal cancer (CRC). Returns to theatre after surgery, and failure to rescue (FTR) are used as indicators of quality of care. This population-based study used administrative data to quantify returns to surgery and FTR in CRC patients across England. It assesses differences between key patient groups, variation over time and across NHS trusts.
Materials & Methods. Using linked National Cancer Registration and Hospital Episode Statistics data, CRC patients undergoing a major resection, between 2010-2014, were identified. Details of returns to theatre within thirty days of resection were extracted. FTR was calculated as deaths within 30 days of primary resection in those who were returned to theatre.
Results. Of 118,714 patients undergoing a major resection, 8.2% returned to theatre at least once within 30 days. Returns were more common in patients with rectal tumours (10.9%) than patients with either colonic (7.1%) or rectosigmoid (8.2%) tumours. Returns were less common in the elderly (6.76%), and more frequent in men (9.4%).
Nationally, returns remained stable between 2010-2013 but fell to 7.4% in 2014. In contrast FTR has fallen each year from 9.5% in 2010 to 7.3% in 2014. Between Trusts, returns to theatre ranged from 2.5%-14.6% (IQR 2.2), and FTR from 0-23.3% (IQR 3.2).
Conclusions. Both returns to theatre and FTR can be estimated from national administrative data for CRC patients, and show trends in time and between patients and Trusts. This demonstrates the utility of both as indicators of quality of care in England.
The UK Colorectal Cancer Intelligence Hub is funded by a CRUK Population Research Committee programme grant, No. C23434/A23706. This work uses data provided by patients and collected by NHS staff as part of their care and support.
Conflict of interest: No conflict of interest.

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BARRIERS TO ORGANIZED MAMMOGRAPHY SCREENING PROGRAM IN HUNGARY: A QUESTIONNAIRE-BASED STUDY OF 3 313 WOMEN

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