Methods Multicenter retrospective study including patients with colon carcinoma surgically resected from 2001 to 2008 (training cohort) and from 2009 to 2013 (validation cohort). A predictive model for neoplasms occurrence at second surveillance colonoscopy was developed and externally validated. **Results** 396 and 131 patients were included in training and validation cohort respectively. Patients with ≥ 1 adenoma at the 2nd surveillance colonoscopy were 113/396 (28.5%) and 21/131 (16.5%) in the two groups. In the validation cohort, 3 cancers were found.

Four variables were associated with higher risk of meta-chronous colorectal adenomas at 2nd surveillance colonoscopy on multivariate analysis: age >65 years old, left colectomy, ≥ 1 advanced adenoma at basal colonoscopy and ≥ 1 adenoma at first surveillance colonoscopy (table 1). The predictive model showed fair discrimination, with an area under the ROC curve of 0.69 and 0.64, in training and validation cohort respectively.

In validation group, If patients with a low-risk profile (i.e. none of the risk factors) skip the 2nd surveillance colonoscopy, 25/131 (19.1%) exams would be saved while missing 2/21 (9.5%) patients with ≥ 1 adenoma; no cancer would be missed.

Abstract IDDF2019-ABS-0110 Table 1 Variables included in the predictive model for developing ≥ 1 adenoma or advanced adenoma at the 2nd surveillance colonoscopy

Variable	Multivariate OR (95%CI)	P
Age >65 years old	1.593 (1.000–2.524)	0.050
Familial history of CRC	2.920 (1.466–5.817)	0.002
Left colonic resection	2.182 (1.325–3.596)	0.002
≥ 1 advanced adenoma at index colonoscopy	2.079 (1.111–3.888)	0.022
≥ 1 adenoma at 1 st surveillance colonoscopy	2.627 (1.631–4.232)	0.001

Conclusions We provided a risk-stratification tool for adenoma occurrence after colon surgery, which could prove cost-effective to select patients who could skip the second surveillance colonoscopy.

Abstract IDDF2019-ABS-0111 Figure 1 Rate of anastomotic and non-anastomotic CRCs detected following surgery for primary CRC

IDDF2019-ABS-0111

COLORECTAL CANCERS DETECTED FOLLOWING SURGERY AT ANASTOMOSES OR OTHER COLORECTAL LOCATIONS DURING COLONOSCOPY SURVEILLANCE – A SYSTEMATIC REVIEW AND META-ANALYSIS

¹Lorenzo Fuccio*, ²Douglas Rex, ³Thierry Ponchon, ¹Leonardo Frazzoni, ⁴Mario Dinis-Ribeiro, ⁵Pradeep Bhandari, ⁶Evelien Dekker, ⁷Maria Pellise, ¹Loredana Correale, ⁶Jeanin van Hooft, ⁸Rodrigo Jover, ⁴Diogo Libanio, ⁹Franco Radaelli, ¹⁰Sergio Alfieri, ¹Franco Bazzoli, ¹¹Carlo Senore, ¹²Jaroslav Regula, ¹³Thomas Seufferlein, ¹⁴Thomas Rosch, ¹⁵Prateek Sharma, ¹⁶Alessandro Repici, ¹⁷Cesare Hassan. ¹University of Bologna, Italy; ²Indiana University School of Medicine, Indianapolis, USA; ³Edouard Herriot University Hospital, Lyon, France; ⁴Faculty of Medicine, University of Porto, Portugal; ⁵Queen Alexandra Hospital, Portsmouth, UK; ⁶Academic Medical Center, University of Amsterdam, Netherlands; ⁷Hospital Clinic de Barcelona, Universitat de Barcelona, Spain; ⁸Alicante Institute for Health and Biomedical Research, Alicante, Spain; ⁹Valduce Hospital, Como, Italy; ¹⁰Digestive Surgery Department, Catholic University, Rome, Italy; ¹¹AOU Città della Salute e della Scienza, CPO Piemonte, Turin, Italy; ¹²The Maria Skłodowska-Curie Memorial Cancer Centre and Institute of Oncology, Warsaw, Poland; ¹³University of Ulm, Germany; ¹⁴Department of Interdisciplinary Endoscopy, University Hospital Hamburg-Eppendorf, Hamburg, Germany; ¹⁵University of Kansas Medical Center, Kansas City, USA; ¹⁶Humanitas Research and University Hospital, Rozzano, Italy; ¹⁷Nuovo Regina Margherita Hospital, Rome, Italy

10.1136/gutjnl-2019-IDDFAbstracts.151

Background Outcomes of endoscopic surveillance following surgery for colorectal cancer (CRC) vary with the incidence and timing of CRC detection, at anastomosis or elsewhere in the colorectum. We performed systematic review and meta-analysis to evaluate the incidence of CRCs identified during surveillance colonoscopies of patients with previous CRC surgery.

Methods We searched PubMed, EMBASE, SCOPUS, and the Cochrane Central Register through January 1, 2018, to identify studies investigating rates of CRCs at anastomoses or other colorectal locations after curative surgery for primary CRC. We collected data from randomized controlled, prospective, and retrospective cohort studies. Data were analyzed by multivariate meta-analytic models.

Results From 2,373 citations, we selected 27 studies with 15,803 index CRCs (89% stage I-III CRCs). Overall, 296 CRCs at non-anastomotic locations were reported over time periods of more than 16 years (cumulative incidence, 2.2% of CRCs; 95% CI, 1.8%-2.9%).

The risk of non-anastomotic CRC is shown in figure A (figure 1A) and significantly decreased after 36 months or more from resection, compared with that before this time point (odds ratio for non-anastomotic CRCs at 36–48 months vs 6–12 months after surgery, 0.61; 95% CI, 0.37–0.98; $P=0.031$); 53.7% of all non-anastomotic CRCs were detected within 36 months from surgery.

One hundred fifty-eight anastomotic CRCs were detected over more than 16-years follow-up (cumulative incidence of 2.7%; 95% CI, 1.9%-3.9%). The risk of anastomotic CRCs is shown in figure B (figure 1B), and was significantly lower after 24 months or more from resection than before (odds ratio for CRCs at anastomoses at 25–36 months after surgery vs. 6–12 months, 0.56; 95% CI, 0.32–0.98; $P=0.036$); 90.8% of anastomotic CRCs were detected within 36 months from surgery.

Conclusions After surgery for CRC, the highest risk of anastomotic and non-anastomotic CRCs is highest during 36 months after surgery - risk decreases thereafter. Patients who have undergone CRC resection should be evaluated by colonoscopy more closely during this time period. Longer intervals may be considered thereafter.

IDDF2019-ABS-0112

PREDICTORS OF OUTCOME OF PERCUTANEOUS CATHETER DRAINAGE OF ACUTE PANCREATITIS WITH FLUID COLLECTION AND DEVELOPMENT OF A PREDICTIVE MODEL

Balaji Bellam*, Jayanta Samanta, Pankaj Gupta, Praveen M Kumar, Vishal Sharma, Narendra Dhaka, Phulen Sharma, Gaurav Muktesh, Vikas Gupta, Saroj Kant Sinha, Rakesh Kochhar. *Post Graduate Institute of Medical Education and Research, Chandigarh, India*

10.1136/gutjnl-2019-IDDFabstracts.152

Background Percutaneous catheter drainage (PCD) is an effective initial strategy of step-up approach for the management of acute pancreatitis (AP). The objective of this study was to identify factors associated with outcomes after PCD

Methods This prospective observational study was conducted from July 2016 - Nov 2017. A total of 101 consecutive AP patients were recruited. Step up approach was followed for the management of patients. We evaluated the association between success of PCD (survival without necrosectomy) and baseline parameters (aetiology, demography, severity scores(SIRS,APACHE II, organ failure),total leucocyte count, C-reactive protein(CRP), and intra-abdominal pressure (IAP), morphologic characteristics on computed tomography, percentage of necrosis, CT severity index (CTSI), characteristics of collection before PCD (timing, nature of collection, volume, site, solid component), PCD parameters (initial size, maximum size, number and duration of drainage) and factors after PCD insertion (fall in IAP, reduction in volume of collection).

Results Among 101 patients of AP, 51patients required PCD. The success of PCD 66.66% (34/51). Four patients required surgical necrosectomy after PCD. Mortality was 29.4% (15/51, including 2 deaths after necrosectomy). Multivariate analysis(6 factors included after univariate analysis) showed the percentage of volume reduction of fluid collection ($p=0.016$) and organ failure (OF) resolution($p=0.023$) after one week of PCD predicted success of PCD. A predictive model based two factors resulted in AUROC- 0.915.

Internal validation by bootstrapping of 5000 resamples showed AUROC 0.906 & is similar to the original model. Nomogram was developed with above factors to predict the probability of success of PCD((figure 1. Nomogram for predictor of PCD success in managing fluid collection in patients with necrotizing pancreatitis total points line indicates total points obtained from predictors and which is synchronized w) figure 1: Total points line indicates total points obtained from predictors and which is synchronized with probability of PCD success line which indicates probability of PCD success). (table 1).

Abstract IDDF2019-ABS-0112 Table 1 Final logistic regression model

	Beta co-efficient	P value	OR	95 % CI of OR
Intercept	-4.83	0.003	0.008	
Organ failure resolution after PCD (Yes)	3.339	0.001	28.20	3.90–203.87
Percentage of volume reduction of collection after PCD	0.053	0.005	1.055	1.06–1.095

Conclusions Organ failure resolution and reduction in volume of collection after one week of PCD are significant predictors of successful PCD in patients with pancreatic fluid collection.

IDDF2019-ABS-0114

ROLE OF LINEAR ENDOSONOGRAPHY IN DIAGNOSIS OF BIOPSY NEGATIVE MALIGNANT ESOPHAGEAL STRICTURES: EXPLORING THE UNEXPLORED

Amol Dahale*, Siddharth Srivastava, Ujjwal Sonika, Ashok Dalal, Aditi Goyal, Puja Sakhuja, Sanjeev Sachdeva, Amarendra Puri. *G B Pant Institute of Postgraduate medical education and research (GIPMER), New Delhi, India*

10.1136/gutjnl-2019-IDDFabstracts.153

Background Endoscopic biopsy is standard for diagnosis of esophageal malignancy. However, few cases present with smooth stricture with repetitive negative biopsy results. We aimed to use linear endoscopic ultrasound (EUS) and fine needle aspiration (FNA) in diagnosis of biopsy negative suspected malignant esophageal strictures.

Methods We retrospectively analyzed the data from August 2017 to December 2018 of biopsy negative esophageal strictures. All adult patients with twice negative biopsies and having smooth overlying esophageal mucosa on endoscopy were included. Clinical, epidemiological, endoscopic, imaging and EUS findings were noted and analyzed.

Results Eighteen patients underwent EUS for suspicion of malignant esophageal stricture. Seven were excluded as they were submucosal tumors in which the role of EUS is already established. Eleven patients showed the presence of malignancy on EUS FNA samples. Nine were males. Computed tomography showed esophageal wall thickening in 8 (16–38 mm) and esophageal mass in 3 patients. EUS showed loss of normal five layered wall structure of esophagus in all patients. FNAC revealed squamous cell carcinoma (n=4), adenocarcinoma (n=4), poorly differentiated carcinoma (n=2) and neuroendocrine carcinoma (n=1). There were no complications.