



## 30th Anniversary Jagelman/40th Anniversary Turnbull International Colorectal Disease Symposium

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The 8th joint Jagelman–Turnbull Colorectal Disease Symposium took place February 14–16 at the Marriot Harbor Beach Resort and Spa in Fort Lauderdale, Florida. There were 26 speakers from Cleveland Clinic Florida and Ohio and over 40 Cleveland Clinic alumni guest speakers from other institutions within the USA and throughout the world. The following are highlights of some of the key topics that were discussed.

### Rectal cancer

The conference commenced with a focus on rectal cancer and its multidisciplinary approach. Albert Parlade of Cleveland Clinic (Florida) spoke about the importance of high-quality pelvic magnetic resonance imaging (MRI) in the workup and management of rectal cancer. While MRI has become the preferred modality for local staging of rectal cancer, improvements are still needed for nodal staging. At high-volume centers, when nodal size and morphology are combined, sensitivity and specificity for predicting nodal metastases approach 85% and 98%, respectively. He also highlighted the importance of synoptic reports as essential for the clarity and completeness of content when staging rectal cancer using pelvic MRI. This focus on synoptic reporting was echoed by Mariana Berho, also of Cleveland Clinic (Florida), who cited the importance of synoptic reporting of proctectomy specimens. According to Berho, despite pathologic grading being “the easiest task in rectal cancer care,” high-quality pathologic reporting is still not being done routinely according to the 2016 GRECCAR Trial. Marylise Boutros of McGill University reviewed the current data regarding predicting complete pathologic response. Despite a plethora of studies, very few data points aside

from size, distance from the anal verge, and mucinous/poor differentiation are useful for predicting pathologic complete response. She highlighted several new studies looking at microsatellite instability (MSI) status, gene profiling, and protein expression, but noted that none of these were ready for “prime time.” Continuing along this line, Dana Hayden of Rush University discussed the location of malignant cells following neoadjuvant therapy. She highlighted the importance of using the preoperative imaging and not residual scar for guiding resection margins during proctectomy. She highlighted literature showing 50% of patients with residual malignant cells beyond the scar following neoadjuvant therapy, and other data showing microscopic disease present in specimens with no residual scar. Hayden also shared her unpublished data showing malignant cell scatter beyond the scar ranging from 3 to 15 mm. Dana Sands of Cleveland Clinic (Florida) and Elisabeth McLemore of Kaiser Permanente spoke about the newest addition to the rectal cancer surgical armamentarium, Transanal Total Mesorectal Excision (TaTME). Sands highlighted the importance of “buy-in” from operating room leadership and nursing when beginning a TaTME program. McLemore also highlighted the importance of standardization when developing proficiency in TaTME. Her training pathway begins with expertise in total mesorectal excision via the abdominal approach, highlighting the importance of a minimally invasive techniques. This is followed by expertise in intersphincteric dissection for low rectal tumors and transanal minimally invasive or endoscopic surgery. Developing TaTME skills on human cadaver models, proctorship/mentoring, and finally ongoing outcomes review and reporting in a TaTME registry complete the training pathway. Jonathan Efron of Johns Hopkins University spoke about the benefits of endobrachytherapy versus traditional external-beam radiation for rectal cancer. He highlighted the lower toxicity and faster average time to surgery (5 weeks) following endobrachytherapy. Despite its benefits, he noted only 276 patients with rectal cancer in the National Cancer Database (NCDB) had received

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endobrachytherapy. In a feasibility trial from his own institution (16 patients), complete clinical and pathologic response was noted in 40% and 33% of patients, respectively. Currently, Phase II clinical trials are underway. Matt Kalady of Cleveland Clinic (Ohio) spoke about the importance of the Multidisciplinary Team (MDT) in management of rectal cancer. He highlighted alarming data showing 50–60% abdominoperineal resection (APR) rate for rectal cancer in most recent literature and 70% of hospitals caring for rectal cancer patients performing <20 rectal resections per year. He highlighted a 2018 study by Karagkounis et al. showing a 26% rate of change in plan following MDT conference (as reported by surgeons). The majority of these plan changes related to imaging interpretation following review by a dedicated rectal cancer radiologist in MDT conference. The session on rectal cancer care concluded with the David G. Jagelman MD Memorial Oration by DDSI Week Co-Chair Steven Wexner, who spoke about the importance of the National Accreditation Program for Rectal Cancer (NAPRC). He highlighted the disparity in rectal cancer care quality between the USA and Europe, where rectal cancer centers of excellence have already been established. He cited an alarmingly high rate of APR for rectal cancer in the USA, as well as worse outcomes with circumferential resection margin (CRM) positivity. He outlined the journey of the NAPRC, from the first discussions held by the American College of Surgeons (ACS) and its eventual development into a full-fledged quality initiative housed within the ACS Commission on Cancer. A rapid quality reporting system, with reporting of patient data within 30 days of first contact for real-time quality monitoring and improvement, was highlighted among the many benefits conferred by membership in the NAPRC.

## Inflammatory bowel disease

There was also a special focus on inflammatory bowel disease (IBD). Miguel Regueiro of Cleveland Clinic (Ohio) helped to make sense of the increasing complex world of biologic therapy for IBD and shared his own decision-making algorithm for choosing which biologic therapy and when. For patients with severe ulcerative colitis (hospitalized) OR Crohn's disease with extensive disease OR perianal fistula, combination therapy with infliximab and azathioprine (substitute methotrexate in young males) should be considered first-line. In cases where there is loss of response to infliximab, switching to another anti-tumor necrosis factor (TNF) should be considered if loss of response is due to immunogenicity while primary loss of response (no antibodies) should prompt switching to another class of biologics. For ulcerative colitis patients in the outpatient setting, vedolizumab can be considered first-line; for those younger than

60 years of age and with no comorbidities/cancer/infection, tofacitinib can be considered. For those with single-segment non-fistulizing Crohn's disease (CD), vedolizumab can also be considered first-line; those less than 60 years of age and with no comorbidities/cancer/infection may be eligible for ustekinumab. Combination biologic therapy is highly recommended in cases of extra-intestinal manifestations.

Stefan Holubar and Bret Lashner, also of Cleveland Clinic (Ohio), discussed IBD surgery and postoperative management in the era of biologics. Holubar cited the divergent evidence regarding the effects of biologic therapy on postoperative outcomes and gave his current recommendations to hold biologic therapy 4–6 weeks prior to surgery and resume within 2–4 weeks. In emergent cases, strong consideration should be given to use of an ileostomy, taking other risk factors into account. Lashner cited evidence that there are histologic changes and inflammation within 1 week following surgery. Risk factors for recurrent disease included smoking, resection requiring anastomosis, fistulizing disease, age <30 years, extensive small bowel involvement, and multiple prior surgeries. He cited the POCER Study, a randomized controlled trial that demonstrated that patients who underwent routine colonoscopy at 6 months following surgery for CD and had early medical management based on mucosal findings had better disease management than those patients who underwent endoscopy for symptoms alone.

## New technologies

New and exciting technologies already in use, in clinical trials, and in preclinical trial state, were discussed. Erim Tolga of Cleveland Clinic (Florida) reviewed endoscopic mucosal resection (EMR), a new use of advanced endoscopy to resect presumably “irretrievable” polyps. He cited the largest study of EMR to date, which showed 16% polyp recurrence, with 93% of recurrences being treated successfully with repeat EMR. Raul Rosenthal of Cleveland Clinic (Florida) continued with a showcase of his work utilizing fluorescent imaging of the common bile duct during laparoscopic cholecystectomy. He cited an eight-nation, 300+ patient randomized controlled trial that had zero common bile duct injuries in patients who had fluorescent imaging performed. Extensions of this technology include improved ureteral visualization during colectomy, imaging sentinel lymph nodes in breast cancer surgery, and parathyroid and recurrent laryngeal nerve visualization during thyroid surgery. David Maron of Cleveland Clinic (Florida) gave a synopsis of robotic platforms on the rise. He introduced the recently Food and Drug Administration (FDA)-approved Senhance platform, which utilizes a console similar to the DaVinci platform, but with the addition of haptic feedback and a camera controlled by the surgeon's head movements. DaVinci also has introduced

a single-port platform, with possible applications in transanal surgery. Maron reviewed other exciting platforms pending FDA approval, such as MiroSurge, Versius, SurgiBot, and the Miniature In Vivo Robot (MIVR). Utilizing data acquired during robotic surgery for possible applications using artificial intelligence (AI)-empowered technologies is also being investigated by numerous groups. The use of AI in endoscopy was further discussed by John Vargo of Cleveland Clinic (Ohio) who discussed AI in adenoma detection. Hyperplastic polyps, both their removal by endoscopists and review by pathologists, cost the US healthcare system billions of dollars. Vargo showcased up and coming technologies that utilize machine learning algorithms and neural networks based on massive stores of training data where hyperplastic polyps could be differentiated from adenomas in real time during colonoscopy. The result of this technology and an adoption of a “diagnose and leave” policy for hyperplastic polyps could result in a greater than one billion dollar savings per year.

### Colorectal cancer and the elderly

The conference continued with a focus on colorectal cancer care in the elderly by Nicole Saur of the University of Pennsylvania, Isacco Montroni (Italy), and Fabio Potenti of Cleveland Clinic (Florida). Saur and Montroni both cited the disparity in the care of elderly patients with colorectal cancer; Saur cited a 2011 French study showing only 45% of elderly patients being referred to a cancer specialist and a 2015 Danish study also showing decreased referral to cancer specialists and decreased treatment for those obtaining referral while Montroni cited the exclusion of patients

> 65 years of age from most clinical trials. Saur cited the major barriers to care being misunderstandings among physicians on life expectancy, neoadjuvant therapy, and overestimating the impact of surgery. Both speakers stressed the importance of frailty screening when addressing the needs of elderly colorectal cancer patients. Although officially recommended in 2005, few clinicians are currently performing frailty screening and most still rely on chronological age for risk stratification. Saur noted this was akin to comparing apples to oranges, as the elderly population can vary widely in independence and frailty. She suggested the use of numerous in-office screening tests, including the G8, the Mini-Cog, the “Get Up and Go” test, and the simple question “Have you fallen?” (one fall in the prior 6 months portends a 50% postoperative complication risk) to risk stratify elderly patients. Montroni added the use of imaging to identify sarcopenia as another identifier of frailty. Those identified as at risk for frailty should be referred preoperatively to a geriatrician for further assessment, and then interventions such as prehabilitation and postoperative care planning prior to surgery. Montroni showed evidence from the International Consortium for Healthcare Outcomes Measurement (ICHOM) showing that while prehabilitation programs for the elderly do not prevent postoperative complications, they do promote faster and fuller functional recovery. Potenti gave a more broad view of the financial impact of cancer. He cited 30% of cancer care dollars being spent on the final year of life and 31% of cancer in-hospital costs being spent on postoperative complications. Using a cost-benefit analysis study, he showed the watch-and-wait approach to be less costly (\$8700) compared to rectal resection (\$10,000) for elderly patients, but noted that in those surviving > 2 years there was a benefit to rectal resection. All speakers noted the



Fig. 1 Cleveland Clinic faculty and alumni gather for DDSI Week 2019

importance of patient-reported outcomes, and not merely survival, as key to colorectal cancer care in the elderly, with maintenance of independence being the key outcome in this patient population (Fig. 1).

## Pelvic floor

The conference also included a focus on the pelvic floor on the final day. A highlight was a discussion by Brooke Gurland of Stanford on “Setting Up a Pelvic Floor Center.” She cited lack of a standardized model for multidisciplinary care of pelvic floor disorders in the USA, despite 25% of women suffering from a pelvic floor disorder and 11% undergoing some procedure for pelvic organ prolapse. Gurland cited buy-in from administrators, dedicated nursing, and advanced practice providers (APPs), and physical therapists passionate about pelvic floor disease as crucial elements for an effective pelvic floor center. A collaborative approach with other specialties including urology and gynecology was also crucial. She cited evidence from her own institution, where 23% of the first 100 patients required evaluation by at least three

specialties and 49% ultimately went on to receive a surgical procedure. Special challenges included the availability of physical therapy services and reimbursement issues.

The meeting was preceded by the third annual Pelvic Dissection taTME Cadaver Lab, led by Cleveland Clinic (Florida) faculty Dana Sands, at the M.A.R.C. Center in Miami, Florida. Overall, over 500 attendees from over 50 countries attended this year’s anniversary symposium. The Cleveland Clinic faculty look forward to welcoming you to south Florida next February for DDSI Week 2020.

## Compliance with ethical standards

**Ethical approval and Informed consent** For this type of study formal consent and ethical approval is not required.

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