

AB007. Near-infrared bowel perfusion angiography during laparoscopic ileocolic resection for Crohn's disease—video vignette

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Background: Medical management remains the initial management strategy in the majority of Crohn's disease. With improved pharmacological agents, the requirement for emergent operative intervention is declining. However, there are cases that are refractory to medical therapy and necessitate surgical management. Insufficient perfusion is a well-recognized concern in bowel anastomotic healing. The use of intra-operative near infrared perfusion angiography provides the surgeon with real time information regarding both arterial inflow and venous outflow of the anastomotic site. It aids in deciding level of anastomosis, and vulnerability of just created anastomosis.

Methods: We present a 31-year-old female with an 11-year

history of Crohn's Disease, previously well controlled on medical management. During her recent pregnancy in late 2018 she began experiencing recurrent flares of disease. Following emergency caesarean section delivery in Jan 2019, she had recurrent episodes of small bowel obstruction and subsequent imaging confirmed a terminal ileal stricture. She underwent a semi-elective ileocolic resection in August 2019. Using a multiport approach, the diseased segment of ileum was identified and dissected. There were significant adhesions between the small bowel, caecum, appendix and sigmoid requiring careful dissection and adhesiolysis. Prior to dividing bowel, perfusion assessment was performed with indocyanine green (ICG) fluorophore. A standard extracorporeal side-to-side stapled anastomosis was performed. The patient had an uncomplicated post-operative course and was discharged home seven days later.

Results: This vignette outlines the use of ICG in assessing anastomotic perfusion in colorectal surgery.

Conclusions: It is inexpensive, safe and straightforward to carry out; and can objectively assess the quality of an anastomosis.

Keywords: Crohn's; ileocolic; indocyanine green (ICG)

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