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BACKGROUND

Robotic compared to the laparoscopic approach to the right hemicolectomy, has been associated with:

- Decreased anastomotic complications
- Increased lymph node harvest
- Decreased length of stay
- Decreased conversion to open
- Comparable morbidity and 30-day mortality (1)

The intrinsic advantages of the robotic platform include better visualisation, intra-abdominal access and stability (2,3).

CASE PRESENTATION

83 year-old female

- Symptomatic anaemia (Hb 88 g/L)
- PHx: of cardiomyopathy and hypertension
- No FHx of bowel cancer

Investigations:

- CEA level: 3.4 ug/L (ref <10)
- Gastroscopy: normal
- Colonoscopy: circumferential proximal ascending tumour
- Biopsies: moderately differentiated adenocarcinoma
- Staging CT: abnormal mural thickening at region of caecum with multiple right sided liver lesions. No other metastases (Fig 1).

Fig 1 Coronal C+ with arrow indicating abnormal caecal mural thickening.



Fig 2 Ileocolic pedicle dissection. Superior mesentery vein, inferior mesentery vein and artery on view.

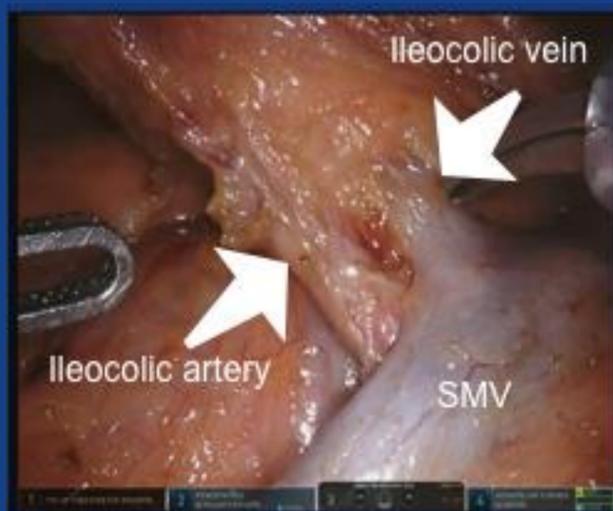


Fig 3 Trunk of Henle dissection.

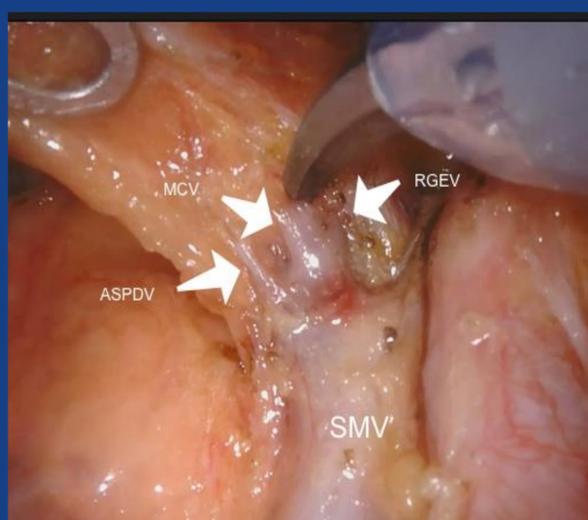
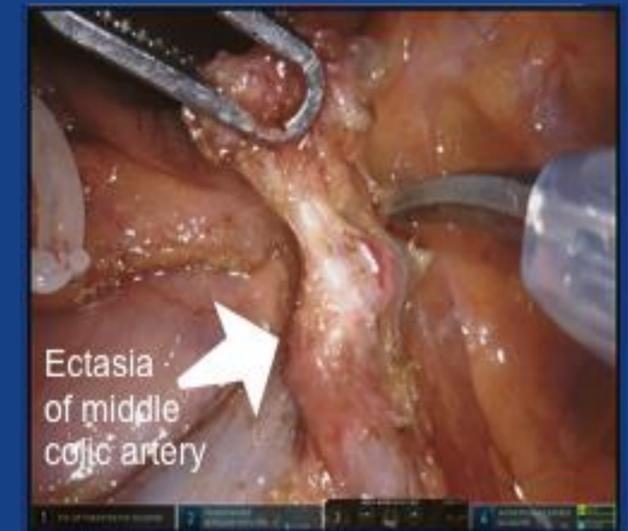


Fig 4 Dissection of the ectatic middle colic artery.

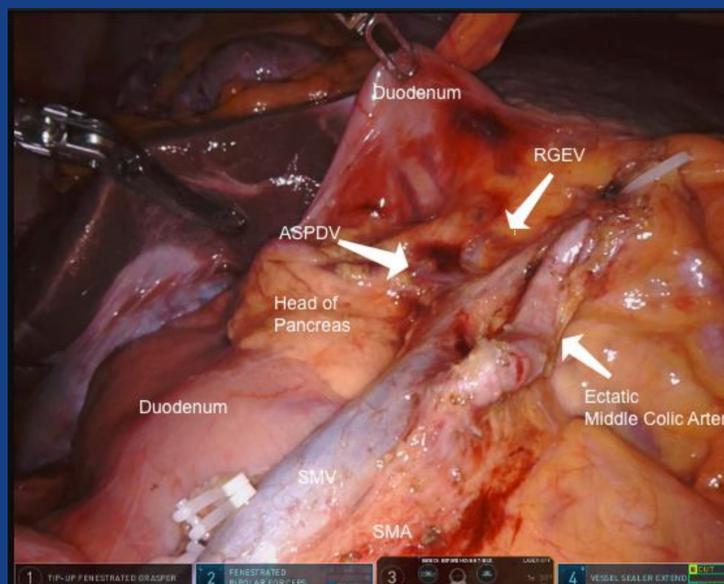


METHODS

The video demonstrates the following steps:

- SMV-first approach
- Dissection superiorly, along the SMV:
 - Ileocolic pedicle (divided) (Fig 2)
 - Trunk of Henle (colic branch divided) (Fig 3)
 - Ectatic middle colic artery (right branch divided) (Fig 4)
- Dissection of the omentum from the transverse mesocolon and lesser sac entered
- Mobilisation of the ascending colon and hepatic flexure
- Transection of the terminal ileum and transverse colon
- Indocyanine green fluorescence to confirm vascularity (Fig 5)
- Intracorporeal, isoperistaltic anastomosis between terminal ileum and transverse colon

Fig 6 Dissection of the ectatic middle colic artery.



DISCUSSION

- Total operative time: 180 minutes
- Discharged day eight post-operatively without complication
- Histopathology: T3N2a moderately to poorly differentiated adenocarcinoma with five out of 33 lymph nodes positive
- This video case study illustrates the advantages of the robotic platform and its safety for robotic right hemicolectomy and central mesocolic excision

REFERENCES

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