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Manuscript Draft

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Title: Late presentation of amoebic liver abscess

Article Type: Clinical Picture

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Supplemental items

Click here to download Supplemental items: Lancet-author-signatures-amoeba.pdf

Manuscript

A 40 year old British man presented to a London hospital with 5 days of fever and right upper quadrant pain, with no diarrhoea. He had travelled extensively across Asia and South America 10 years previously, with travel to Germany in the past year. His partner and two children were asymptomatic.

Vital signs were normal, temperature was 36.6ºC, and examination demonstrated right upper quadrant tenderness. Admission bloods showed a mild leucocytosis with neutrophilia (10.5 x 10^9/L), and abnormal liver function tests (Bilirubin 19 umol/L, ALT 105 U/L, ALP 138 U/L) with raised C-Reactive Protein (308 mg/L). Abdominal Computerised Tomography revealed two large hypodense hepatic lesions and a thickened caecum with bulky pericolic and mesenteric lymph nodes. Colonoscopy showed patchy areas of ulceration and friable tissue in the caecum.

Intravenous Co-amoxiclav was commenced, and the following day the liver abscesses were drained under ultrasound guidance. The patient clinically improved, however liver pus was sterile on culture with negative 16S bacterial rRNA PCR. Colonic biopsies showed inflammation and granulation tissue, with no parasites seen. Stool ova, cyst and parasite microscopy was negative.

Amoebic serology revealed an Indirect Fluorescent Antibody Test titre of 1:160, indicating amoebic liver abscess. A positive Cellulose Acetate Precipitin test confirmed this. Liver pus PCR was positive for *Entamoeba histolytica* DNA. Entamoeba PCR on stool and on colonic biopsies was negative.

A 10 day course of Metronidazole 800mg three times/day was administered followed by Paromomycin 35mg/kg for 7 days to clear intra-luminal cysts. At 3-month follow-up, he was asymptomatic, with a normal colonoscopy and liver ultrasound.

This case highlights the need to consider *Entamoeba histolytica* as a cause of sterile liver abscess even without a recent travel history since manifestations can rarely develop years after initial infection. Colonic ulceration is often present, which may provide a clue to diagnosis.

Statements

All 4 authors were involved in the direct care of the patient, and co-authored and approved the manuscript.
Written informed consent has been obtained from the patient.
No ethical approval was required. We have no funding source, and no conflicts of interest to declare.

***Manuscript with revisions highlighted**

Manuscript

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Coronal CT image of liver abscess
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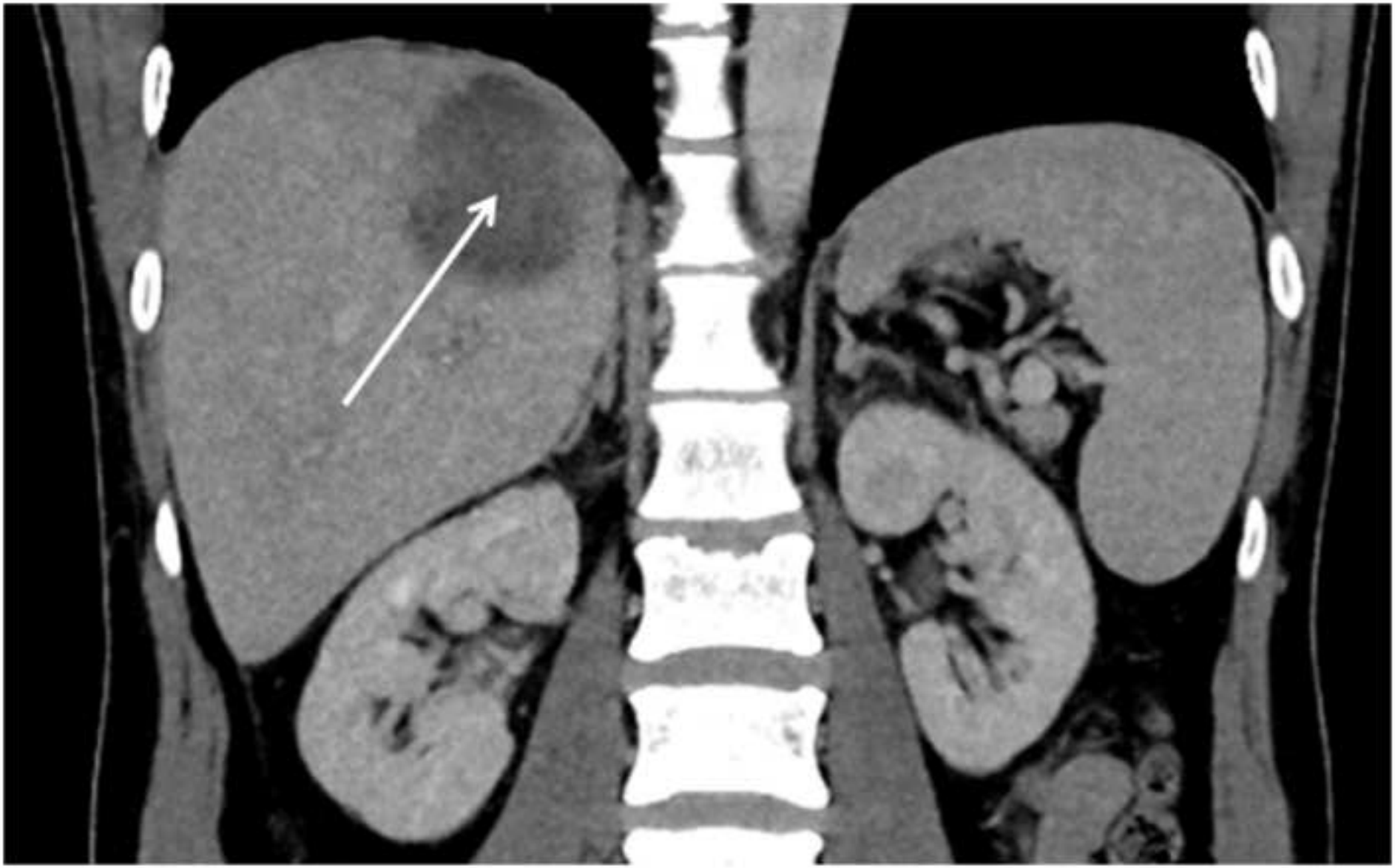

Coronal section of abdominal CT scan, with arrow pointing to liver abscess

***Reply to Reviewers Comments**

Editor's comments:

- Can you add the co-amoxiclav dosage?
- Can you include only one image in the main text please? Others can be included in an online appendix.
- Provide figure legends and add arrows to the figure to indicate areas of interest.
- Can each author please complete and return this form please? https://els-jbs-prod-cdn.literatumonline.com/pb/assets/raw/Lancet/authors/icmje-coi-form-1450293798173.zip

Reply to editors comments below:

Many thanks.

We have added the co-amoxiclav dosage.

We have removed 2 of the images, leaving only one image, which has now been captioned with a legend, and an arrow has been added pointing to the abscess.

Each author has completed the ICMJE form.

Ankush Dhariwal

Figure 1A. Coronal CT image of liver abscess
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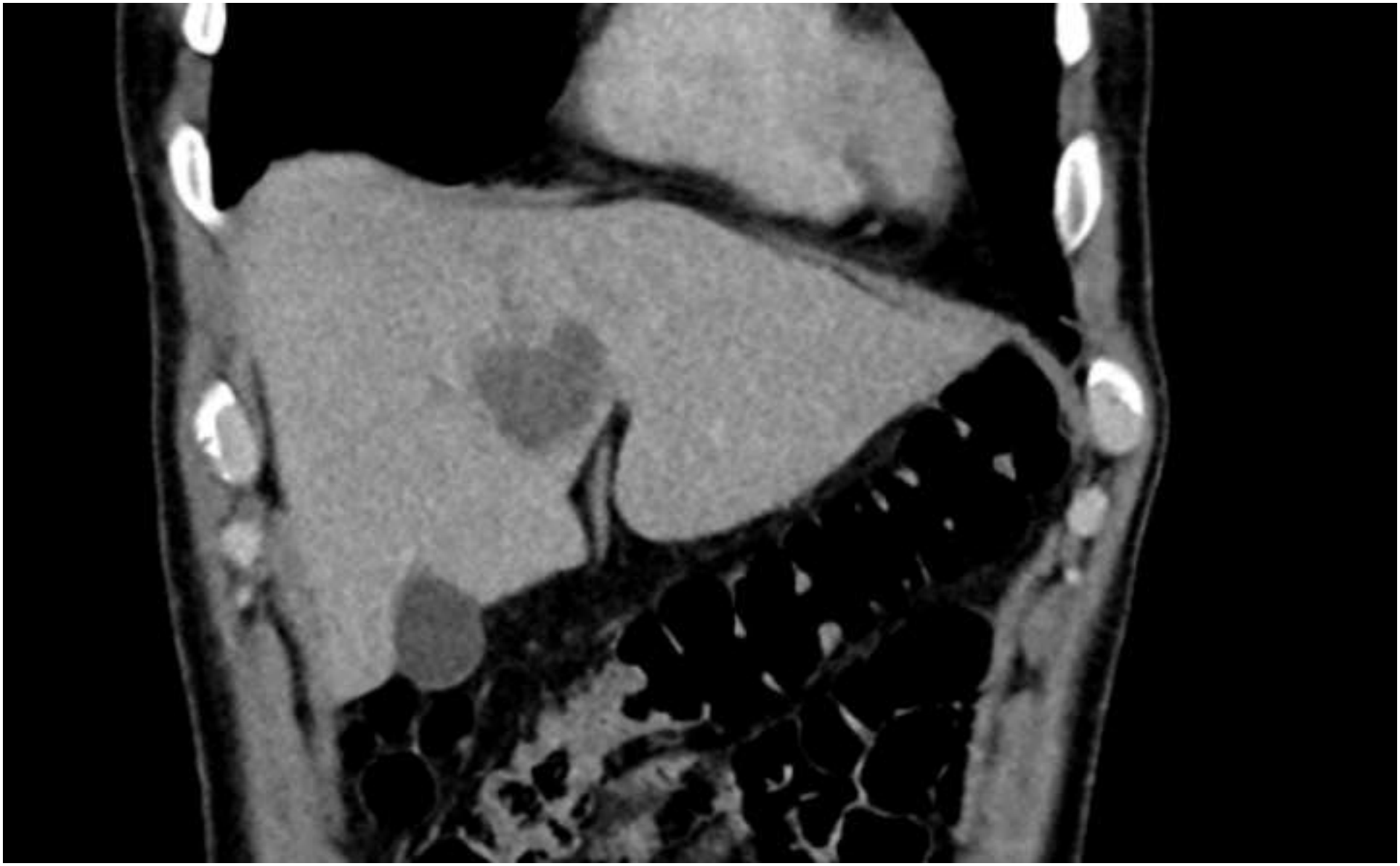

Figure 1B. Coronal CT image of liver abscess
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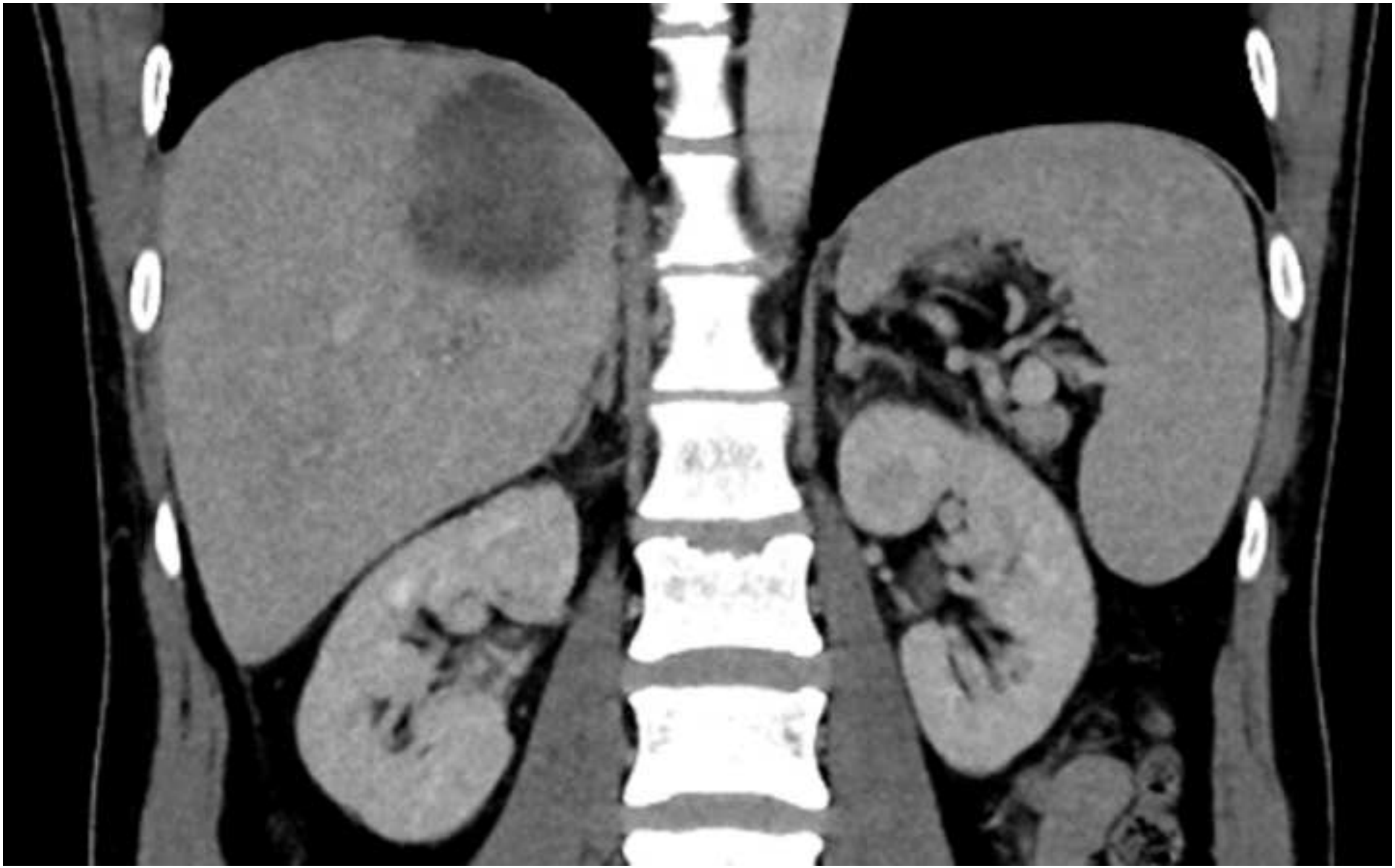

Figure 2.Colonoscopy image of caecum - ulcerated/ friable tissue
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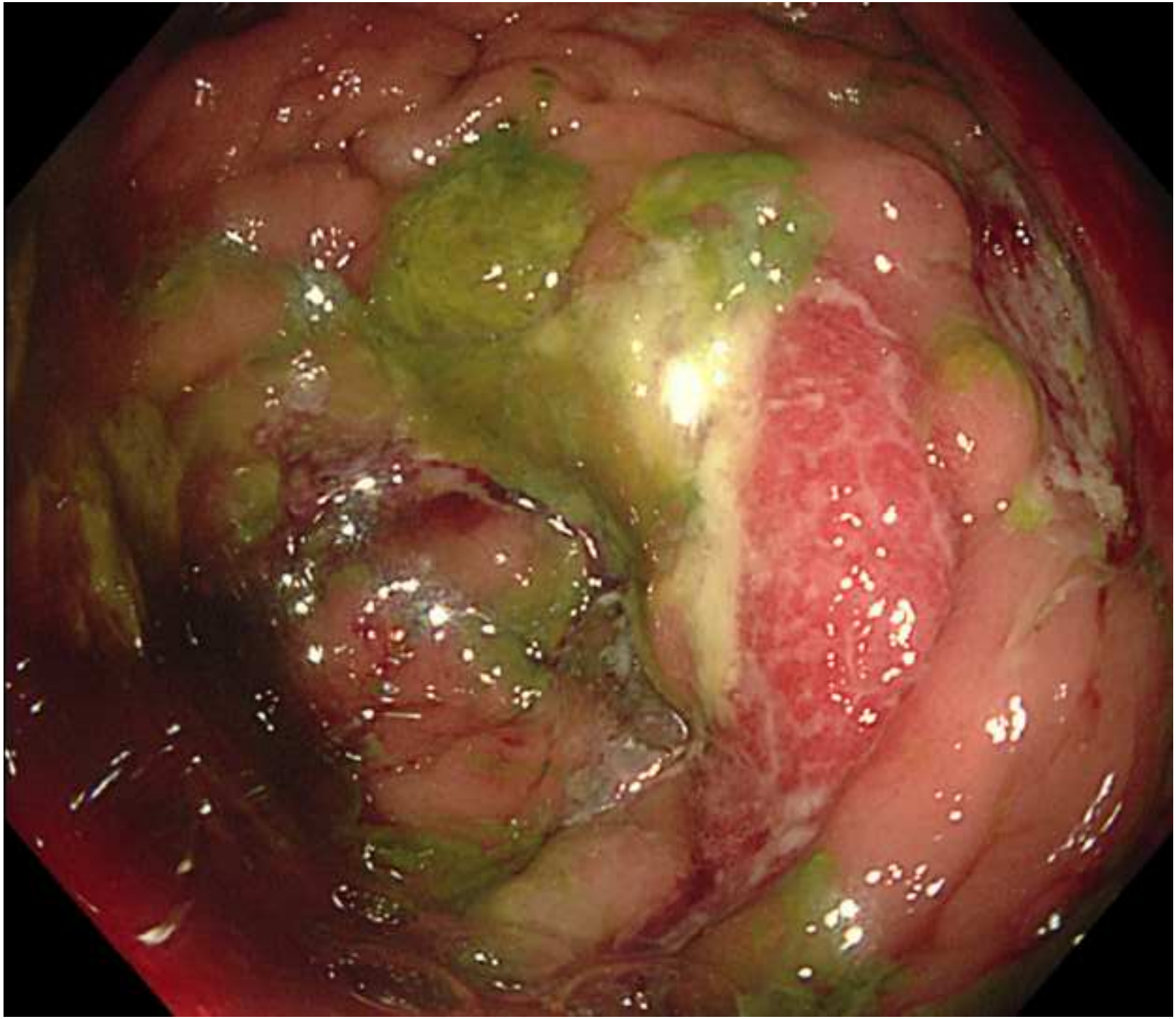

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