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## Medical Imagery

## Diarrhea in an immunosuppressed patient – The accordion sign



A 58 year old man with a history of acute myeloid leukaemia and allogenic stem cell transplant presented with recurrent diarrhoea. He was commenced on empirical methylprednisone due to concerns about graft-versus-host-disease (GVHD). Physical examination was unremarkable. He had raised inflammatory makers (C-reactive protein of 48.4 mg/L), normal white cell count ( $5.3 \times 10^9/L$ ) and a low positive cytomegalovirus DNA (327 copies/mL). A Computed Tomography (CT) of his abdomen with oral and intravenous contrast (Figures 1 and 2) demonstrated marked wall thickening from the sigmoid colon to the cecum with mucosal hyperenhancement and pericolic stranding. This

appearance is highly suggestive of pseudomembranous colitis and is the result of oral contrast being trapped between the crevices of oedematous haustral folds and pseudomembranes formed on the luminal surface of the colon; known as the “Accordion sign”. However it can also be seen in ischaemic colitis and other causes of infective colitis (Macari et al., 1999). Intravenous metronidazole and oral vancomycin was started and resulted in improvement in his diarrhea. Subsequently, his clostridium difficile toxin enzyme immunoassay (EIA) came back positive. His flexible sigmoidoscopy revealed mildly erythematous mucosa, active inflammatory changes (Figures 3 and 4) without any changes of GVHD.

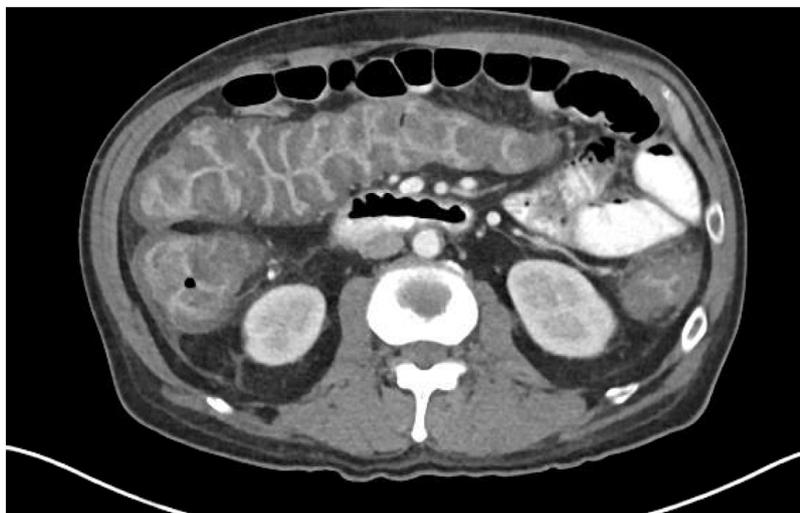
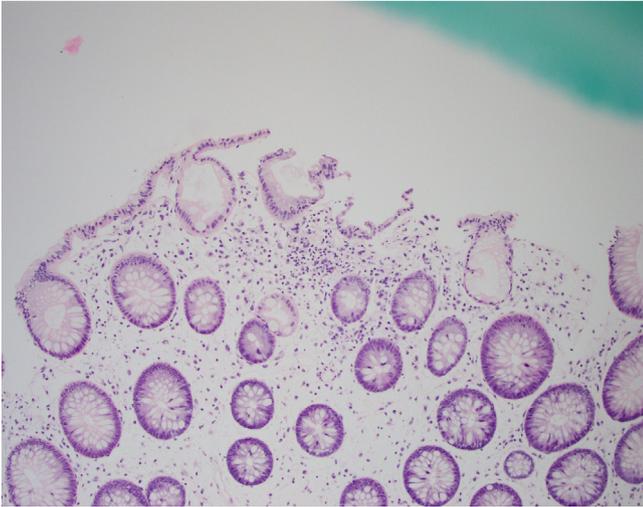


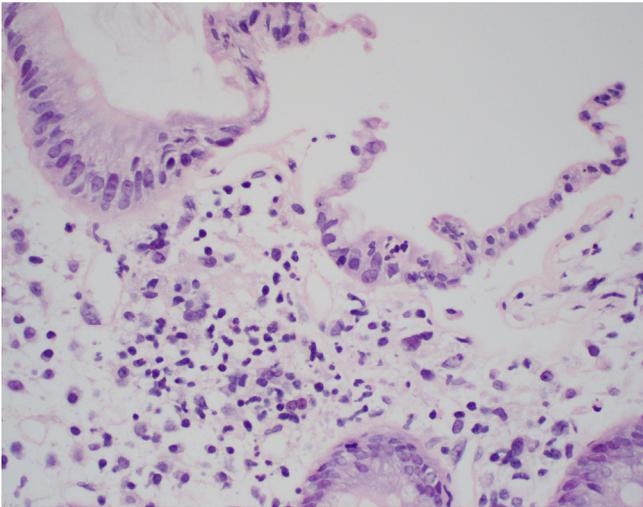
Figure 1. Representative horizontal section from computed tomography of the abdomen/pelvis.



**Figure 2.** Representative coronial section from computed tomography of the abdomen/pelvis.



**Figure 3.** Original magnification  $\times 100$ : Low power view, showing preserved crypt architecture and is mostly unremarkable, except for focally increased cellularity of superficial lamina propria.



**Figure 4.** Original magnification  $\times 400$ : High power view, showing neutrophilic infiltration of lamina propria at the corresponding focus, with infiltration into adjacent crypt epithelium.

### Conflict of interest

None.

### Funding source

None.

### Ethical approval

Consent from patient obtained.

### References

Macari M, Balthazar EJ, Megibow AJ. The accordion sign at CT: a nonspecific finding in patients with colonic edema. *Radiology* 1999;211:743–6.

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