

## Case Report

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# CT Diagnosis of Lupus Enteritis

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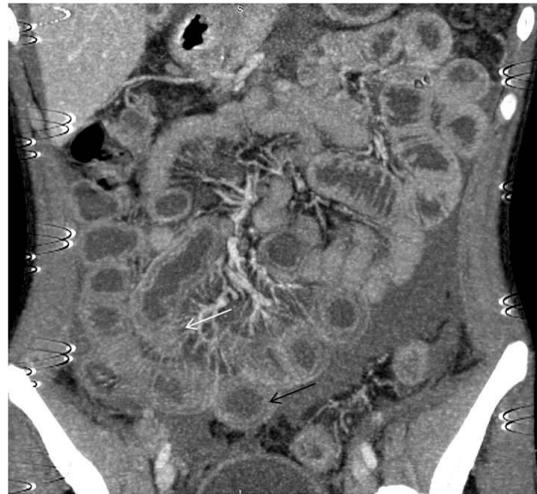
### 1. Case Report

A 25 year old female patient was a diagnosed case of systemic lupus erythematosus with haematological, musculoskeletal, oral and dermatological manifestations. Patient was stable and remained asymptomatic for last 5 years. For last 2 months as the steroids were tapered and patient missed few doses, she developed fever, joint pains, oral ulcers, odynophagia and shortness of breath. Patient also complained of abdominal pain which was acute in onset, moderate to severe in intensity, continuous, diffuse involving whole of abdomen and relieved partially on analgesic. There were 2-3 episodes of vomiting followed by loose stools. No h/o hematemesis or melena was seen.

On examination, pulse 132 b/min, BP 140/90 mm Hg, SpO<sub>2</sub>-97% on room air, RR- 28/min. patient was conscious and alert. No pallor, icterus, cyanosis, clubbing, LAP/edema seen. On local examination-mild tenderness present over right hypochondrium. Bowel sounds were sluggish. No organomegaly/ free fluid. Initially laboratory workup showed anaemia. LFT, RFT, coagulation profile were within normal limits. Serological examination showed elevated ANA, Anti ds DNA, raised hsDNA and raised pro-BNP.

For evaluation of abdominal pain, plain X-ray of abdomen was done which was normal. Ultrasound scan of abdomen showed mild amount of free fluid in abdomen and pelvis. For further evaluation of patient, CT angiography of abdominal vessels followed by CECT of abdomen was done which showed small bowel wall thickening and enhancement giving characteristic 'target sign' (formed by enhancing innermost mucosa, middle non enhancing submucosa and outermost enhancing muscularis propria ± serosa) (Figure 1). There was adjacent

mesenteric fat stranding with prominent mesenteric vasculature giving comb sign (Figure 1). Mild ascites was also seen. Abdominal aorta and major branches were normal in contrast opacification. Based on these characteristic features, diagnosis of lupus enteritis was kept. Patient was started on parenteral high dose steroid therapy following which marked improvement was observed in symptoms.



**Figure 1:** Coronal Post contrast CT image showing dilated and thickened small bowel loops (target sign, black arrow) with mesenteric vessel engorgement (comb sign, white arrow).

Lupus enteritis is a relatively uncommon manifestation of SLE and frequently presents as abdominal pain, diarrhoea and vomiting [1]. It most commonly involves the jejunum and ileum. Principal imaging findings seen on abdominal CT are bowel wall thickening  $> 3$  mm also called as target sign, engorgement of mesenteric vessels also known as comb sign and increased attenuation of mesenteric fat [2]. Treatment for lupus enteritis is high-dose intravenous steroid therapy and complete bowel rest. In few cases immunosuppressants such as azathioprine or cyclophosphamide may be beneficial [3].

### Conflicts of Interest

Nil

### Funding

Nil

### References

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