

Hanna Lateef M.D.<sup>a</sup>, Gaby Cordero M.D.<sup>a</sup>, Daehan Justin Yi M.D.<sup>a</sup>,  
Akio Kozato M.D.<sup>a</sup>, Dylan Cuva M.D.<sup>a</sup>, Jessica Chiang, M.D.<sup>a</sup>, Alexander Hien Vu M.D.<sup>a</sup>, Pamela Mar M.D.<sup>a</sup>  
<sup>a</sup> Department of General Surgery, New York University Langone Health

## Background

- Leukocytoclastic vasculitis is a small-vessel vasculitis of dermal capillaries and veins
- Clinically presents with purpura on lower extremities, small vessel involvement, and rarely, extracutaneous manifestations
- **Etiology:** idiopathic (most common), infections, drugs, underlying autoimmune diseases
- **Pathophysiology:** immune complex deposition in small vessel walls leading to vessel injury, in addition to activation of the complement system
- **Epidemiology:** Annual incidence is 45 per one million individuals, non-selectively occurring in all ages and genders
- **Diagnosis:** Skin biopsy with direct immunofluorescence
- **Management:** Typically supportive, chronic cases can be treated with steroid taper over 4-6 weeks, rarely requires immunosuppressive agents
- We present a case of a patient who presented with symptoms concerning for small bowel ischemia who underwent a negative laparotomy and was found to have leukocytoclastic vasculitis

## Case Description

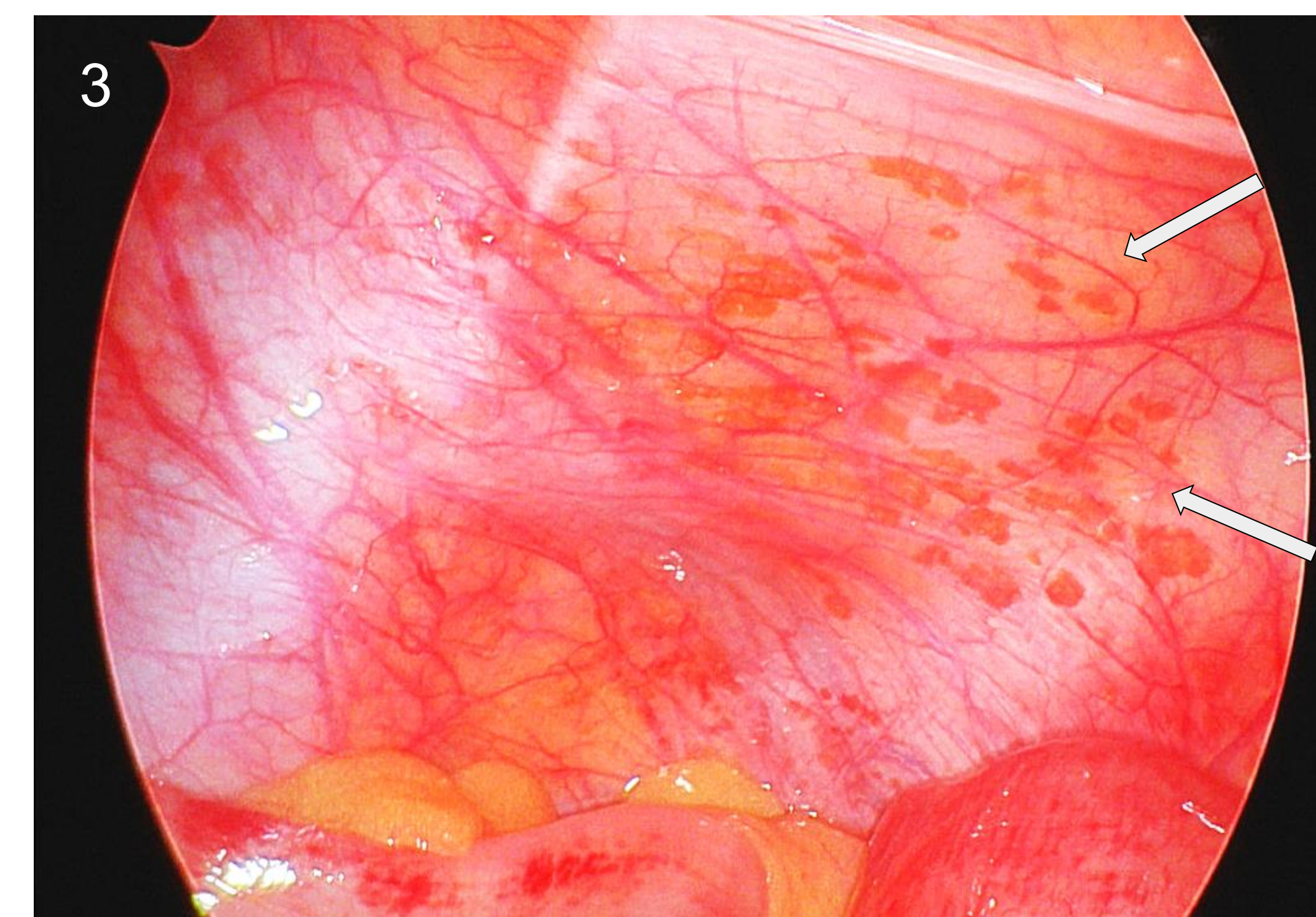
A 20-year-old male with no significant past medical history presented with petechial rash and intermittent abdominal pain for one week, and hematochezia, nausea, and emesis for two days. He was initially admitted for work up of his rash and underwent a skin biopsy with pending results at the time of general surgery evaluation. On exam, he was noted to have diffuse abdominal tenderness as well as a petechial rash on his bilateral upper and lower extremities. His work-up was remarkable for leukocytosis to 43.3, bandemia of 12%, and a lactate of 2.3. He underwent a CT-scan of his abdomen and pelvis demonstrating a long segment of enteritis, diffusely dilated loops of small bowel, small volume ascites, and questionable pneumatosis of the small bowel concerning for bowel ischemia.



**Figures 1a and 1b.** CT-scan of abdomen and pelvis, axial view (1a) and coronal view (1b) demonstrating diminished enhancement of distal dilated small bowel loops with pneumatosis versus trapped air.



**Figures 2a and 2b.** left upper extremity (2a) and lower extremity (2b) rash.



**Figure 3.** Intraoperative findings demonstrating peritoneal lining with a similar pattern of petechia as seen in figures 2a and 2b.

## Case Description (continued)

A nasogastric tube was placed, and the patient was taken emergently to the operating room for diagnostic laparoscopy converted to exploratory laparotomy for an unavoidable serosal tear due to dilated small bowel. Additional intraoperative findings included hemorrhagic ascitic fluid within the abdomen, diffuse enteritis and dilated small bowel, and a similar petechial pattern on the peritoneal lining as observed on the patient's skin. Dermatopathology from a skin biopsy eventually resulted in leukocytoclastic vasculitis. Post-operatively the patient remained with a nasogastric tube for ileus, and diet was advanced appropriately. He declined surgical follow up and underwent treatment of his vasculitis in the outpatient setting with oral steroids.

## Discussion

We present a case of leukocytoclastic vasculitis with a rare manifestation of gastrointestinal symptoms initially concerning for bowel ischemia. We demonstrate a low threshold to proceed to the operating room for diagnostic laparoscopy based on his clinical picture, and intraoperative findings reflecting a vasculitic process.

## References

1. Shavit E, Alavi A, Sibbald RG. Vasculitis-What Do We Have to Know? A Review of Literature. *Int J Low Extrem Wounds*. 2018 Dec;17(4):218-226
2. Fekete GL, Fekete L. Cutaneous leukocytoclastic vasculitis associated with erlotinib treatment: A case report and review of the literature. *Exp Ther Med*. 2019 Feb;17(2):1128-1131
3. Tolaymat L, Hall MR. StatPearls [Internet]. StatPearls Publishing; Treasure Island (FL): Apr 17, 2023. Pigmented Purpuric Dermatitis

## Disclosures

The authors declare that they have no relevant or material financial interests that relate to the research described in this poster

## Acknowledgements

- New York University