Leukocytoclastic Vasculitis with IgA Deposition in the Setting of Xanthogranulomatous Pyelonephritis

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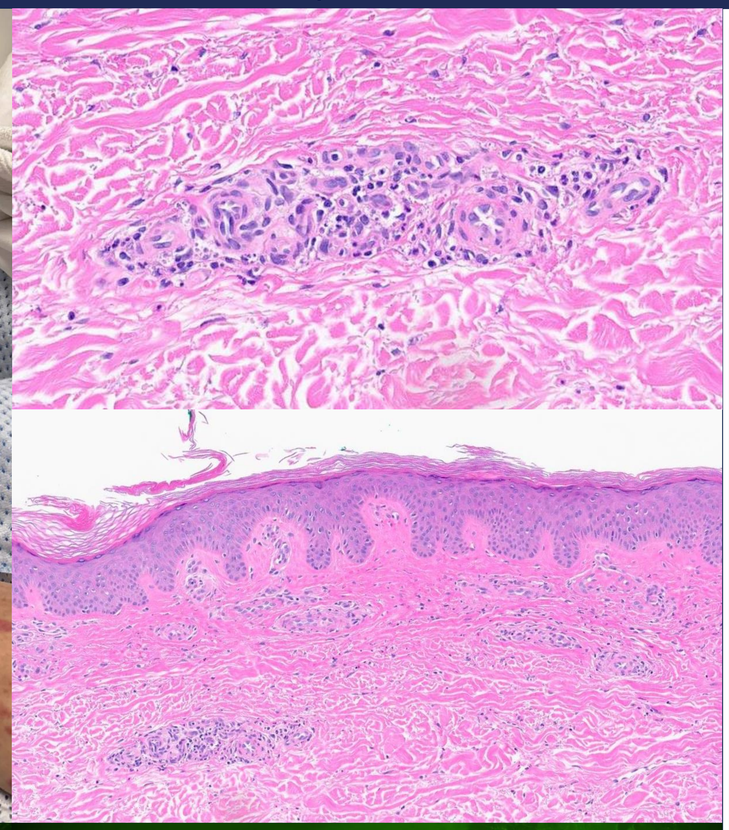
Introduction

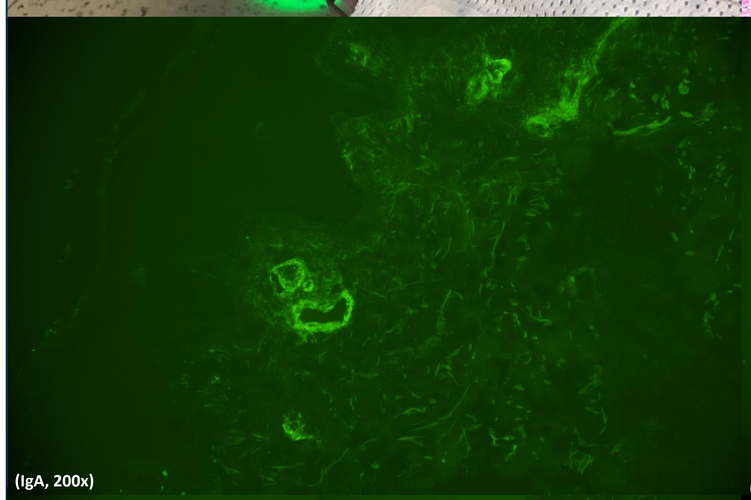
We present a case of leukocytoclastic vasculitis with IgA deposition arising in the setting of xanthogranulomatous pyelonephritis, a destructive renal infection rarely linked to cutaneous vasculitis. This case highlights an underrecognized trigger for IgA vasculitis and the value of coordinated renal and dermatologic care.

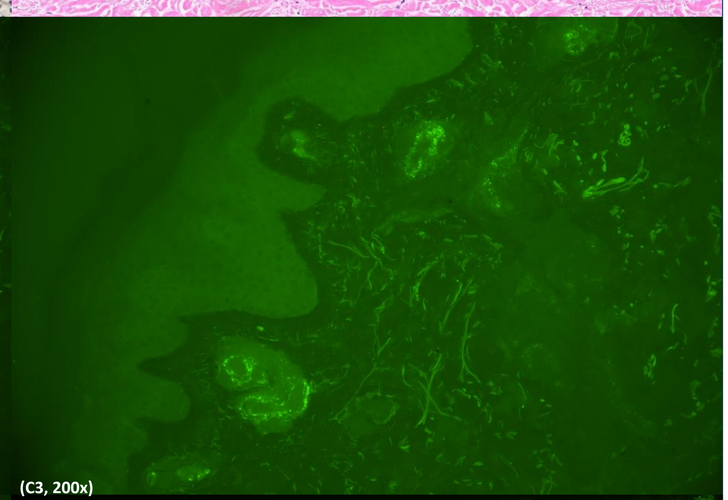
Case

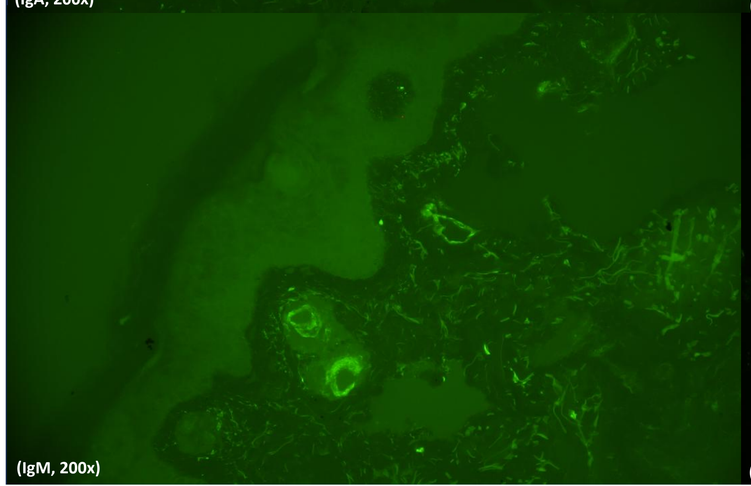
- A 52-year-old male with a history of hypertension presented as a transfer from an outside hospital with right flank pain, chills, fatigue, and poor appetite.
- Imaging was consistent with right xanthogranulomatous pyelonephritis with a ureteropelvic junction stone. He was started on cefepime and metronidazole and underwent drain placement.
- Dermatology was consulted on hospital day three for a rash that had developed one day prior to admission.
- Exam revealed bilateral palpable purpura diffusely across the lower extremities, with erythematous macules and papules coalescing into larger plaques. The rash was asymptomatic per the patient.
- Leukocytoclastic vasculitis was suspected clinically. Punch biopsies of the left leg confirmed LCV on H&E, with DIF showing granular deposition of IgA, IgM, C3, and fibrinogen within blood vessel walls, consistent with IgA vasculitis.
- Given the underlying renal pathology and IgA positive DIF findings, nephrology was consulted and recommended close monitoring of renal function for up to six months.
- The patient was treated with triamcinolone 0.1% ointment and supportive measures.

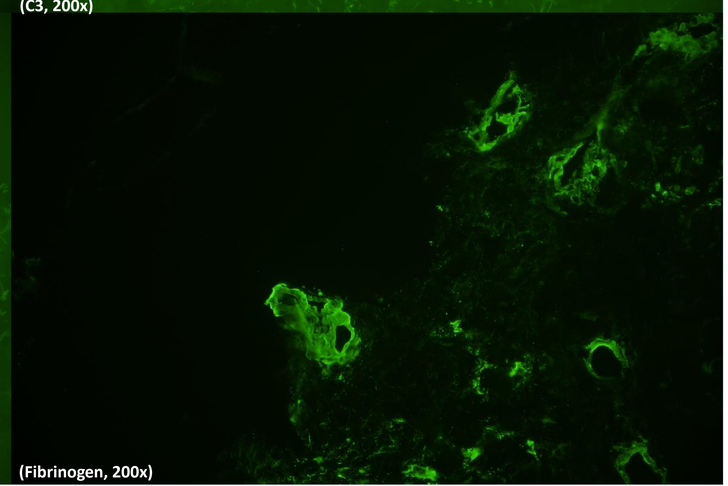












Discussion

- IgA vasculitis in adults is often idiopathic but can be triggered by infection, malignancy, or medications, making identification of an inciting cause an important part of workup.
- Xanthogranulomatous pyelonephritis is a rare, destructive form of chronic renal infection typically associated with obstruction and recurrent infection, and it has not previously been reported as a trigger for LCV.
- Renal involvement in IgA vasculitis can range from mild hematuria to progressive glomerulonephritis, so nephrology involvement and extended monitoring are warranted even when initial renal function appears preserved.
- Treatment of cutaneous IgA vasculitis is generally supportive, with topical steroids and observation sufficient for limited skin disease, while systemic therapy is reserved for more severe or organ threatening presentations.
- To our knowledge, this represents the first reported case of LCV occurring in the setting of Xanthogranulomatous pyelonephritis. It points to the value of considering occult infectious sources when evaluating new onset vasculitis, and the need for multidisciplinary management whenever renal involvement is present.

References

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