



Cocaine Induced Levamisole Vasculitis

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INTRODUCTION

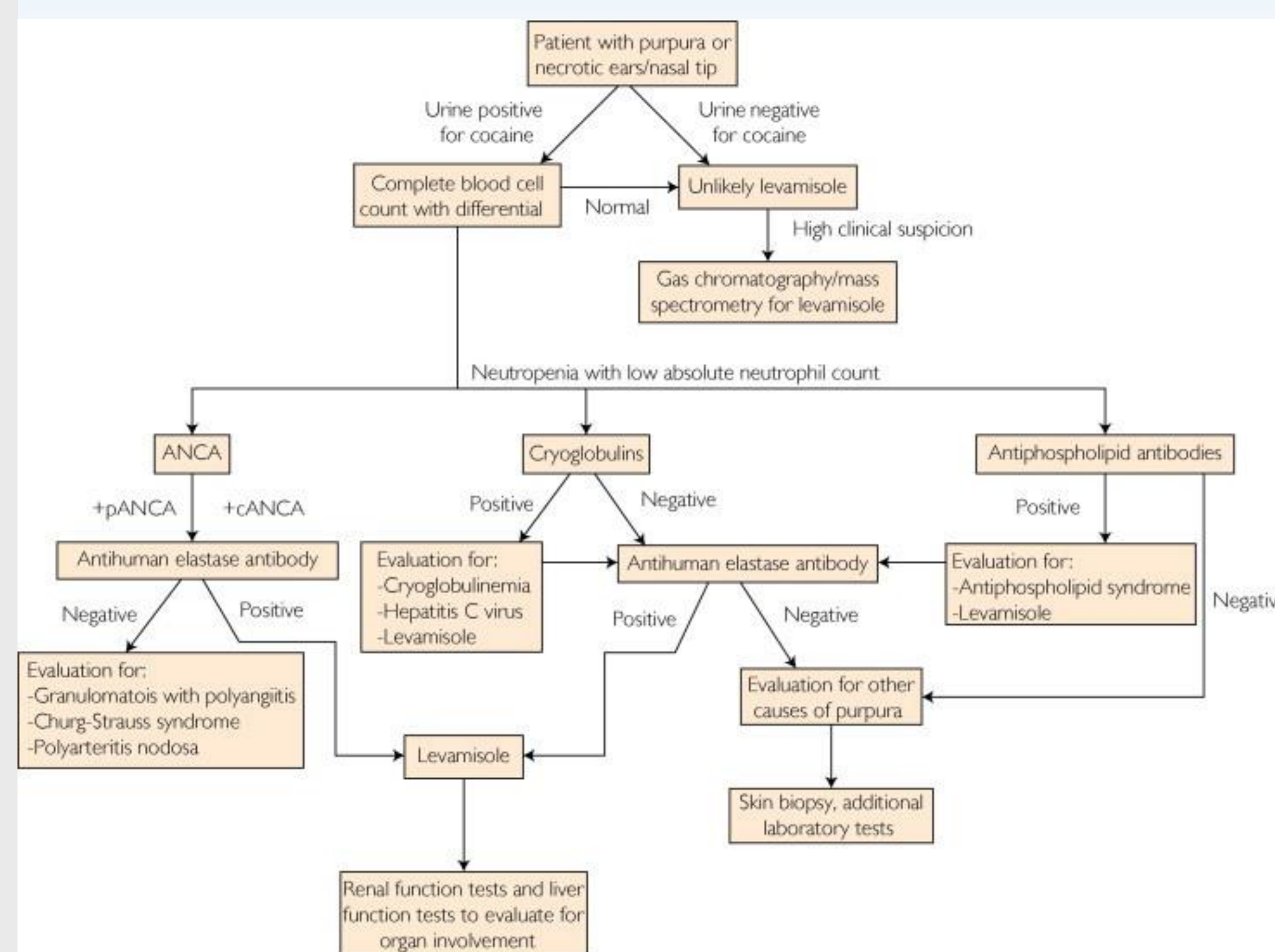
Levamisole is an immunomodulator which was originally used as an adjuvant to colon cancer treatment. The immunomodulator was later discovered to cause agranulocytosis, leukoencephalopathy, and cutaneous vasculitis which can ultimately lead to cutaneous necrosis. The United States Drug Enforcement Agency first noted cocaine laced with levamisole in 2003. In 2010, investigators found that 70% of patients with a urine drug screen positive for cocaine also tested positive for levamisole. Levamisole-related toxicity cases generally document 52% of patients presenting with oropharyngeal complaints, while 27% presented with soft tissue infections or purpura commonly of the ear and nose. Herein, we present a patient with multiple symptoms noted in cocaine abuse including bowel necrosis and extensive soft tissue purpura on all extremities.

MATERIAL AND METHODS

In exploration of differentials of the presenting patient's epidermal changes an extensive workup including antibody levels, vasculitis panel cryoglobulins, viral loads and a skin biopsy were collected. A multidisciplinary team was involved including Dermatology, Hematology, Nephrology, General Surgery, as well as Pathology. Primary treatment included wound care, steroids and pain control.

RESULTS

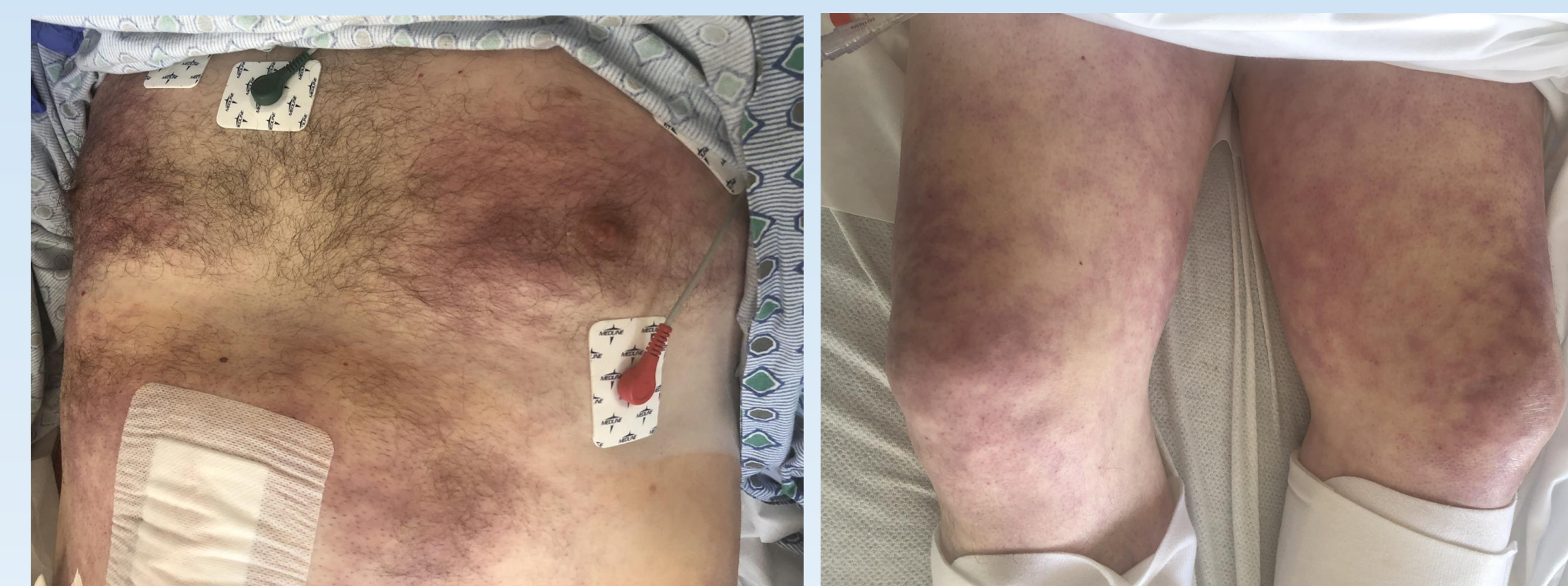
The patient presented to the hospital with abdominal pain and was emergently taken to the operating room. An exploratory laparotomy was performed which included right hemicolectomy, terminal ileum resection, and cholecystectomy. On postoperative day two the patient began to develop skin molting of all four extremities. These skin changes developed into areas of soft tissue purpura and necrosis. A punch biopsy of the patient's left thigh was obtained which was positive for acute vasculitis with intravascular organizing thrombi consistent with primary vasculitis. Notable lab results that were consistent with primary vasculitis exhibited in this patient include an elevated P-ANCA as well as FANA speckled pattern stain. Supportive care and local wound care were performed on patient's multiple lesions with improvement of swelling and pain at the time of discharge.



RESULTS

Antimyeloperoxidase	>100
ANA	Positive
Antiproteinase 3 (PR-3) Abs	<3.5
Atypical pANCA	<1:20
C3 (serum)	112
C4 (serum)	16
C-ANCA	<1:20
P-ANCA	1:320
FANA Stain: Speckled Pattern	1:640
IgA	181
IgE	106^
IgG	1156
IgM	444^

Day 3



Day 7



Day 11



CONCLUSION

Levamisole is no longer used as an immunomodulatory in colon cancer treatment because of its devastating side effects of cutaneous vasculitis, agranulocytosis, and leukoencephalopathy, however unknowingly to the user it is used in Cocaine. Cocaine induced Levamisole vasculitis results in a painful and disfiguring skin condition. Mainstay treatment includes supportive care of skin lesions and pain control. Additionally, patients often receive steroids to decrease the inflammatory response. In severe cases surgical debridement may be necessary including amputation and skin grafting. The most important thing to convey to patients is the need for cocaine cessation.

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