Levamisole Induced Auricular Autoimmune-like Vasculitis

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Purpose

• Discuss the clinical presentation, explain the required workup and treatment for head and neck manifestations of levamisole induced vasculitis which may be seen in cocaine drug user

• To describe a disease entity, with most common clinical presentation as cutaneous purpuric and necrotic lesions with a predilection for distal areas on the head and neck (eg. helix of auricles and tip of nose).

• Discuss the clinical presentation, explain the required workup and treatment for head and neck manifestations of levamisole induced vasculitis which may be seen in cocaine drug user

Background

• Levamisole, an anthelmintic no longer for human use, is found in up to 70% of cocaine confiscated in the US.

• Levamisole induced vasculitis is in increasingly recognized phenomenon with a propensity for the head and neck region that may pose a diagnostic challenge for the otolaryngologist. Lesions typically are purpuric/eschars on the auricle and nose.

• Non-cutaneous manifestations include glomerulonephritis and other vasculitis-type complications

Case Report

A 52 year old African American male with no known past medical history presented to a tertiary center ED with complaint of bilateral ear pain, swelling of 2 day onset. There has been one transient episode in the past. The patient was started on empiric antibiotics in the ED. Though other etiologies were considered given the bilateral presentation.

Further questioning revealed a history of cocaine use recently and preceding the prior episode. Laboratory studies were drawn for infectious etiologies, auto-immune conditions, and rheumatologic conditions. Antimyeloperoxidase and anticardiolipin antibodies returned as elevated in this patient without any other abnormal laboratory values. History, clinical findings, and suggestive lab data, a diagnosis of levamisole-induced auto-immune vasculitis was rendered. Wound care was initiated, but the patient was lost to follow up.

The patient presented to clinic 1 year later with complaints of aural swelling. In the interim, his auricles underwent an “auto-amputation like” reaction and he was left with significant deformity. Local wound care was used to salvage the remaining tissue. The patient recently quit using drugs as a result of his disease.

Conclusions

• In the context of drug use, levamisole vasculitis should be in the differential for eschars/purpuric rashes of the head and neck

• Treatment has not been established, but steroids and wound care have been described

• Non-cutaneous manifestations include other vascular complications such as glomerular nephritis and must be considered in management.

References


