

# Levamisole-induced vasculitis: case report

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## Introduction:

Levamisole-contaminated cocaine is an increasingly reported cause of a syndrome characterized by vasculitic skin lesions and immunologic abnormalities. With approximately 70% of cocaine in the United States now contaminated with levamisole, the incidence of this syndrome is likely to increase.

**Case report:** We report the case of a 42 years-old caucasian woman who underwent our observation due to fronto-temporal pulsating headache and progressive bilateral loss of vision with nyctalopia. Historical anamnesis was positive for cocaine abuse and high alcohol intake, previous right retinal haemorrage and inhospitalization for pericarditis and paroxysmal supraventricular

#### tachycardia.

## Neurological examination : normal except for bilateral tunnel vision



Visual field 1) LEFT EYE 2) RIGHT EYE



**Other exams:** She performed brain CT and MRI (both negative), maxillofacial (showing chronic sinusitis CT and previous nasal septum perforation, of outcomes parodontopathy) and visual field showing bilateral centrocecal scotomas. Nasal septum biopsy showed skin necrosis and chronic mucositis. Optical coherence tomography showed bilateral temporal fibers thickening. Blood exams showed high titre ANCA antibodies positivity (pANCA/MPO 85.7), ANA positivity (1:80), slight increase of ESV (50 mm, normal range 1-32mm, RCP 70.1 normal value<5). Complete blood count and renal function were both normal.

**Diagnosis and therapy:** Prednisone 1mg/kg/daily was started with general conditions improvement (even because she was forcedly abstinent). Cocaine abuse was reconsidered as she declared that she used to cut cocaine with Levamisole. Levamisole is added to cocaine because it potentiates its stimulant effects by inhibiting both monoamine oxidase and catechol-*O*-methyltransferase activity, thereby prolonging the action of catecholamines in the neuronal synapse and increasing the reuptake-inhibition effect of cocaine. Levamisole metabolites also have a stimulatory effect. A diagnosis of Levamisole -induced vasculitis was consequently performed.

## BRAIN MRI AXIAL SECTIONS 3)T2 4) FLAIR

**Conclusion:** Levamisole induced vasculitis is an emerging syndrome that should be considered in cocaine chronic abusers. Therefore, clinical and laboratory correlation with histologic findings and historical data is essential for diagnosis and treatment

### **Bibliography:**

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