

# Vasculitis And Cerebral Infarcts: Probable Role Of Marijuana

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## Abstract

In this paper we present a case of vasculitis and stroke induced by marijuana smoking.

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## INTRODUCTION

Marijuana is a commonly used illicit drug. In addition to its psychotoxic effects, many side effects are seen during chronic state [1]. It has also immunomodulator effects. Chronic use of marijuana may cause susceptibility to opportunistic infections [2]. Marijuana may cause elevation of CD4 cells, and decrease of CD8 cells, elevation of CD4:CD8 ratios in peripheral blood, thus may cause immunodysregulation [3].

It is reported that smoking of marijuana may cause progressive peripheral arteritis or stroke [4,5] but vasculitis has not been reported before. In this paper we present a case of vasculitis with cerebral infarcts, probably induced by marijuana smoking.

## CASE REPORT

A 38-year-old man was admitted to the hospital due to left sided hemiparesia and petechias on pretibial area, buttocks and trunk for about two days. On admission blood pressure was 160/90mmHg. Platelet count, bleeding time and other coagulation test and hemoglobin level, leucocyte count, urine analysis, biochemical tests including lipid profile were found within normal limits. FANA, ANCA, RF tests were negative. Cranial MRI revealed multiple cerebral infarcts and MR angiography was normal. His medical history revealed tobacco smoking for 20 years and inhalation of marijuana for the last 3 weeks. After smoking abundant marijuana at last night, he felt paresthesia at left side and noted purpuras at morning. There was no familial history of deep venous or arterial thrombosis. Biopsy of lesions was compatible with leukocytoclastic vasculitis. Methyl

prednisolone 48mg and heparin were commenced; symptoms and signs were disappeared at the end of the first week of therapy. He was asymptomatic at the first month of therapy and we lost follow up then.

## DISCUSSION

Many patients with peripheral arteriopathy or stroke due to marijuana smoking has been reported up to now in the literature [6,7,8,9]. It is reported that other drugs of abuse such as ecstasy and amphetamine may cause vasculitis [10]. In accordance with our knowledge this is the first case of vasculitis addressed to marijuana smoke. The cause of vasculitis is not ANCA associated. Immune modulatory effects of marijuana might have triggered vasculitis in our patient.

## CONCLUSION

In accordance with our knowledge, this is the first case of marijuana associated with vasculitis and stroke. The illicit use of marijuana should be considered in patients presented with an unexplained cause of stroke and associated vasculitis.

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