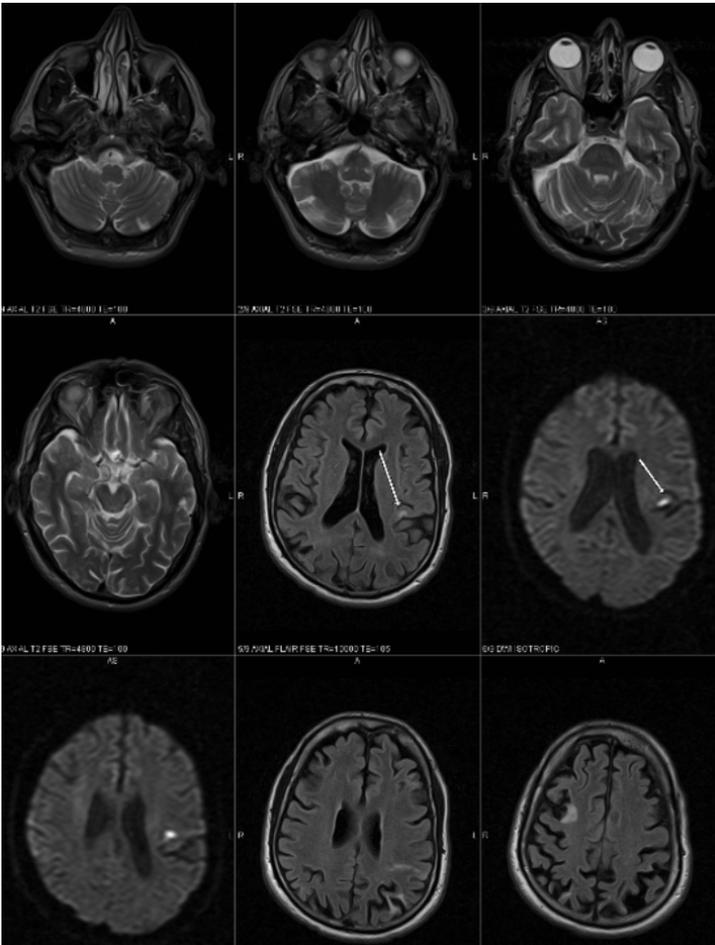


# A Curious Case of Stroke Anomaly

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MRI WITH CONTRAST OF THE CASE PATIENT HYPER-ATTENUATED LESIONS NOTED LEFT LATERAL VENTRICULAR REGION

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### CLINICAL PRESENTATION

Stimulant drugs, including cocaine and amphetamines, are well-established risk factors for cardiac events. Other indigenous recreational drugs have also been proposed as potential cardiac risk factors, but due to a lack of awareness in cross-cultural medicine and limited evidence, these drugs are often overlooked.

We report a case of a 59-year-old Yemeni male with a history of chewing the stimulant plant *Catha edulis* (Khat) who presented to us in the Northwest Family Medicine clinic, with multiple occurrences of acute coronary syndrome (ACS) and stroke/transient ischemic attack (TIA).

The patient has a past medical history of three CVA/TIA events, dilated cardiomyopathy with a reduced ejection fraction of 30-35%, coronary arteriosclerosis, hyperlipidemia, hypertensive disorder, type 2 diabetes mellitus without complications, anemia, and GERD, and a history of Khat abuse. He used to chew Khat daily while in Yemen about 30 years ago and states that it was a common practice in Yemeni culture. Currently, he chews Khat occasionally every two

weeks or on special occasions.

Multiple CT and MRI scans were performed at an outside facility and confirmed the CVA events.

## DIFFERENTIAL DIAGNOSIS

- Seizures
- Syncope
- Migraine aura
- Transient global amnesia
- Hypoglycemia
- MS
- Subdural Hematomas
- Cerebral amyloid angiopathy
- Medication non-compliance
- Catha edulis abuse
- Ischemic CVA

## MANAGEMENT

- Management of traditional risk factors for CAD like diabetes mellitus, hyper-tension, smoking, family history of CAD, and obesity.
- Failed trial of multiple antiplatelet and anticoagulation medication
- Currently managed with warfarin by his cardiologist with abstinent to khat.

## DISCUSSION

Khat is a plant native to East Africa and the Arabian Peninsula that has been traditionally used as a stimulant. Chewing the leaves of the khat plant releases cathinone, which is a stimulant similar to amphetamines.

Studies have shown that khat use is associated with an increased risk of cardiovascular events, including stroke. Chronic khat use has been linked to the development of hypertension, which is a major risk factor for stroke. Additionally, khat use has been associated with changes in the heart rhythm, including atrial fibrillation, which can also increase the risk of stroke.

There is also evidence to suggest that khat use may have a direct toxic effect on the blood vessels, leading to inflammation and damage to the arterial wall, which can increase the risk of stroke.

It is important to note that khat use is illegal in many countries, including the United States, and its use has been linked to a number of health and social problems. If you are concerned about the effects of khat use, it is important to discuss your concerns with a healthcare professional.

In conclusion, khat chewing is associated with an increased risk of stroke, as well as other cardiovascular events. If you are using khat, it is important to be aware of the potential health risks and to discuss any concerns with your healthcare provider.

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