

References

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Stroke after heavy cannabis smoking

Sir,

We would like to report two cases of acute central nervous system dysfunction in previously fit young men with no risk factors for stroke, that followed severe cannabis intoxication. Stroke is known to be associated with acute alcohol intoxication in similar circumstances.^{1,2}

Case 1

A 27 year old West Indian man with no previous medical history was admitted following a period of heavy cannabis smoking. Examination was unremarkable except that the patient was euphoric. The next morning he had developed a pseudo-bulbar palsy. All investigations were normal, including the sickle solubility test, haemoglobin, ESR, serum cholesterol and triglycerides, blood urea and electrolytes, liver function tests, glucose tolerance, chest and skull X-rays and the cerebrospinal fluid (CSF). Blood and CSF VDRL were negative. Intravenous thiamine made no impact. A year later he was still dysarthric and emotionally labile with a residual right-sided weakness.

Case 2

A 28 year old West Indian man with no past medical history was admitted to the psychiatric unit acutely confused and euphoric following a prolonged bout of cannabis smoking. On admission a conjugate deviation of the eyes to the left was noted though physical examination was otherwise normal. All investigations as for case 1 were normal. Intravenous vitamin B complex daily was examined. The conjugate deviation settled over 2 days. He was discharged with no permanent sequelae.

In a small, under-developed, independent island-state resources are limited and it is not possible to measure urine or plasma cannabinoids nor to perform computed tomographic scans, but it is clear that both these previously fit young men developed acute brain lesions, perhaps vascular in origin, following severe cannabis intoxication.

Similar cases have been described. Garrett *et al.*³ reported a

young man who presented unconscious with bilateral pyramidal signs following a large dose of tetrahydrocannabinol. Mohan & Sood⁴ described a case of conjugate deviation of the eyes following cannabis intoxication very similar to case 2.

All this suggests that, similarly to alcohol, severe cannabis intoxication may be a factor in the cause of stroke, especially if the patient is initially euphoric. The mechanism is unknown as in stroke associated with alcohol. Dehydration or hypotension may play a role or perhaps the phenomenon of intoxication itself may lead to areas of neuronal death.

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