

# EYE DIDN'T SEE THIS COMING: CASE REPORT OF DELTA-8 THC PSYCHOSIS WITH ATTEMPTED AUTOENUCLEATION

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## BACKGROUND

- Delta-8 THC is a non-controlled psychoactive substance that has rapidly grown in popularity in the United States since 2018.
- While structurally different from delta-9 THC, there is increasing evidence for similar psychiatric adverse effects, including psychosis, in patients who use delta-8 THC products.<sup>1</sup>
- We present a case of psychosis complicated by thermal burns and attempted autoenucleation following the use of delta-8 THC.

## CASE

- A 58-year-old female with a past medical history of hypertension and major depressive disorder presented to the emergency department with 2% total body surface area burns to her hands and knees from a toaster fire.
- She was noted to have bilateral conjunctival lacerations with concern for attempted autoenucleation, prompting psychiatric consultation for evaluation of psychosis.
- Per collateral from the patient's partner, there was concern for new onset religious preoccupation over the past month after beginning use of a delta-8 THC product.
- On exam, religious delusions were evident with themes of sin prompting the melting of her jewelry in the toaster oven to destroy it, auditory hallucinations of Jesus, and fear of apocalypse.
- Quoting Matthew 18:9, "if your eye causes you to stumble and sin, pluck it out and throw it away from you [...]" autoenucleation was attempted with a spoon and a fork.
- While her history was notable for major depressive disorder, her depression was in sustained remission on venlafaxine ER leading up to time of presentation.
- She denied that her recent injuries were in the setting of suicidal ideation, and she denied a history of mania or psychosis.

## RESULTS

- Labs were notable for a mild leukocytosis, a normocytic anemia, and a mild elevation in AST.
- Urine toxicology was positive for cannabinoids, tricyclics, and acetaminophen.
- CT brain with and without contrast showed an incidental asymmetrical mineralization in the right basal ganglia.
- Due to concern for substance-induced psychosis, olanzapine 5 mg at bedtime was started with resolution of religious delusions over a three-day period.
- Venlafaxine was continued throughout her admission.
- Given her clinical improvement, olanzapine was discontinued prior to discharge without recurrence of symptoms.

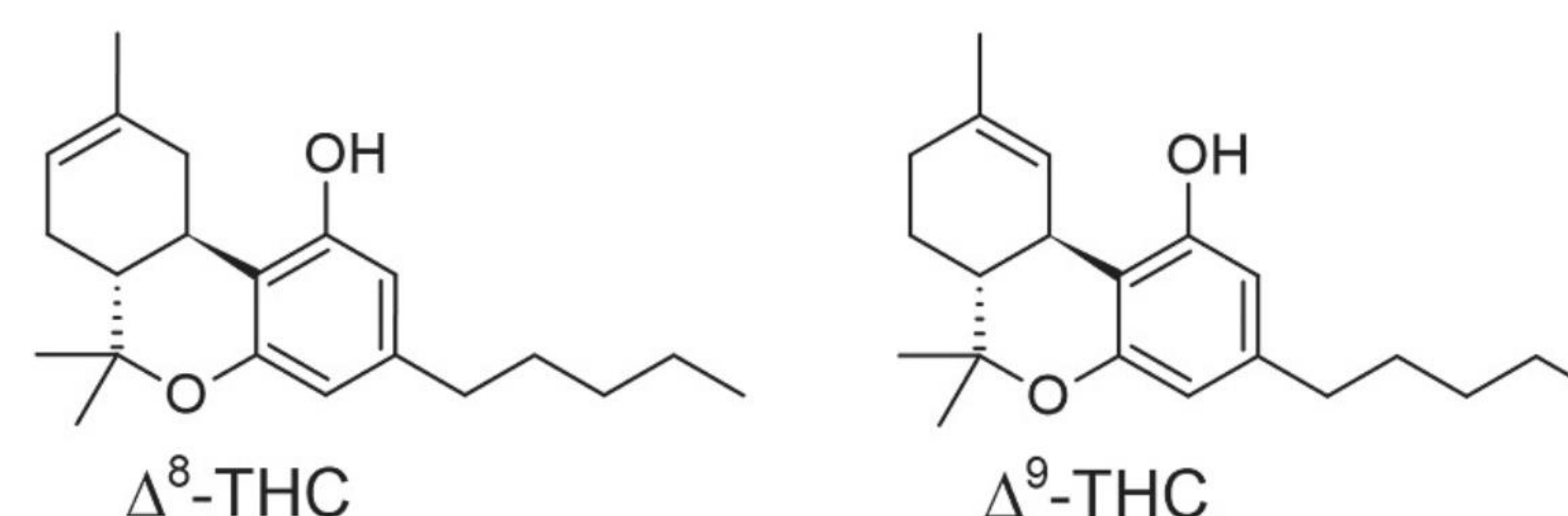


Figure 1: Chemical structure of delta-8-THC and delta-9-THC<sup>3</sup>

| Delta-8-THC              |  |
|--------------------------|--|
| <b>Alternative Names</b> | "THC lite"<br>"diet weed"<br>"work weed"   |
| <b>Derivation</b>        | Naturally occurring from cannabis plant at very low levels, thus it's created synthetically from CBD |
| <b>Potency</b>           | Binds to CB1, but at a lower affinity than delta-9-THC   |
| <b>Legal</b>             | Schedule 1*, varies by state   |

Table 1: Information on delta-8-THC, as per LoParco, et al<sup>4</sup>

## DISCUSSION

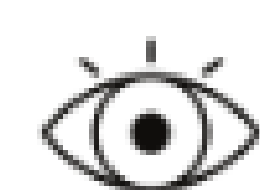
- Psychosis is a known risk factor for autoenucleation, especially when ideas of reference surrounding biblical verses are present.
- While substance-induced psychosis resulting in self-injury has been described in the literature<sup>2</sup>, to our knowledge, this is the first case of delta-8 THC-induced psychosis with attempted autoenucleation.

## CONCLUSION

- While thought to be less potent and psychoactive than delta-9 THC, substance-induced psychosis appears to be a possible side-effect of delta-8 THC use.
- Given our case, it appears psychosis can be quite severe, resulting in self-injury that requires medical hospitalization.
- Considering its growing use in the community, consultation-liaison psychiatrists should familiarize themselves with the possible psychiatric adverse effects of delta-8 THC use.

## REFERENCES

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IF YOUR EYE CAUSES YOU TO STUMBLE AND SIN,  
PLUCK IT OUT AND THROW IT AWAY FROM YOU  
– MATTHEW 18:9