

PO-14

Lost in the Mist – Poppers Maculopathy; Toxic Maculopathy Induced by Volatile Nitrates

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Objective: To present two cases of patients who developed toxic maculopathy following the high-risk use of volatile nitrates (poppers).

Methods: Both patients underwent a comprehensive clinical examination, advanced imaging diagnostics, visual field testing, and electrophysiological assessments.

Results: Clinical examination revealed a small yellowish lesion in the fovea of both eyes in both patients. The first patient exhibited symptoms consistent with toxic maculopathy, whereas in the second patient, toxic maculopathy was incidentally diagnosed during diagnostic evaluations for a branch retinal vein occlusion in one eye. Optical coherence tomography (OCT) in both cases demonstrated characteristic symmetrical changes in the fovea, including hyperreflectivity with disruption of the ellipsoid zone. Electrophysiological assessments confirmed cone dysfunction in both patients. In the first patient, morphological and functional improvement was observed following abstinence; however, a relapse led to deterioration, which subsequently improved again with renewed abstinence, as confirmed by OCT and electrophysiological testing. In contrast, the second patient did not show any improvement despite being advised to abstain, likely due to prolonged exposure to the toxic substance and an unreliable history of abstinence.

Conclusion: The high-risk use of volatile nitrates can lead to toxic maculopathy with a characteristic clinical presentation. Abstinence is the only effective approach for potential recovery.

Izgubljeni v Meglici – Poppers Makulopatija; s Hlapnimi Nitriti Povzročena Toksična Makulopatija

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Namen: Predstaviti primera dveh pacientov, ki sta ob tveganji uporabi hlapnih nitritov (poppersov) razvila toksično makulopatijo.

Metode: Pri obeh pacientih smo poleg kliničnega pregleda opravili obširno slikovno diagnostiko, preiskave vidnega polja in elektrofiziološke preiskave.

Rezultati: Ob kliničnem pregledu smo pri obeh pacientih v obeh foveah videli drobno rumenkasto liso. Prvi pacient je imel simptome v povezavi s toksično makulopatijo, pri drugem pa je bila toksična makulopatija ugotovljena naključno ob diagnostičnih preiskavah zaradi zapore veje centralne retinalne vene na enem očesu. OCT preiskava je pri obeh pacientih v fovei pokazala tipične simetrične spremembe: hiperreflektivnost s prekinjivo elipsoidne cone. Elektrofiziološke preiskave so pri obeh pacientih pokazale okvaro čepnic. Pri prvem pacientu je ob abstinenci prišlo do morfološkega in funkcionalnega izboljšanja, ki mu je ob relapsu sledilo poslabšanje, ob ponovni abstinenci pa ponovno izboljšanje tako funkcionalno kot morfološko, kar smo potrdili z OCT in elektrofiziološkimi preiskavami. Pri drugem pacientu kljub svetovani abstinenci ni prišlo do izboljšanja stanja, najverjetneje zaradi dolgotrajne izpostavljenosti toksični substanci in nezanesljivi anamnezi abstinencie.

Zaključek: Tveganja uporaba hlapnih nitritov povzroča toksično makulopatijo s tipično klinično sliko. Edina možnost za izboljšanje stanja je abstinanca.