Ocular Delusional Parasitosis in Schizophreniform Disorder with Concurrent Cocaine Use: A Case Report and Literature Review

Delusional parasitosis (DP) is a rare and potentially debilitating psychiatric condition characterized by false beliefs of bodily infestation with parasitic organisms such as worms or insects. Also known as delusional infestation or Ekbom syndrome, DP typically involves sensations of skin crawling or itching. Affected individuals may attempt to remove imagined parasites, leading to self-inflicted skin excoriations. Ranier et al. (2014) studied DP with ocular involvement and found that DP with ocular involvement has been described in only 15 published cases. Ocular DP can be particularly devastating, as attempts to eliminate parasites can lead to permanent vision loss. Endogenous cases are often attributed to mental illness, the patient and involuntarily committed her.

Case Summary

A 43-year-old Caucasian female with no relevant comorbidities self-presented to the emergency department for “parasites” in her right eye and a several month history of dermatological and gastrointestinal infestation with “roundworms.” A review of the chart revealed a four-month history of messages to her family physician with images of feces and requests for treatment of parasitic infection. The patient had self-medicated her perceived infection with oral vermicin, a vitamin and an over-the-counter dietary supplement advertised for gut-cleansing, which she had applied directly to her right eye. Ophthalmic exam was significant for right periorbital edema, a conjunctival injection, a 6x6 mm corneal abscess, and ocular pH of 8.10. Visual acuity, extraocular movements, and intraocular pressure remained intact. Her right eye was flushed via a Morgan Lens with 21 liters of fluid. Erythromycin ointment, moxifloxacin eye drops, and cyclopleolate eye drops were started for ocular chemosis.

Delusional parasitosis is a psychiatric condition characterized by the belief of an infestation with parasites. It is often associated with delusions of infestation, which may take the form of rubbing or extracting parasites, leading to corneal ulcerations (8). It is a rare condition, with only 15 published cases of ocular DP. Ocular DP presents with symptoms such as rubbing, extractions, or attempts to remove parasites.

Differential Diagnosis

- Delusional disorder, somatic subtype
- Substance induced psychosis
- Schizophreniform disorder
- Medical illness

Workup:

- UDS cocaine positive
- Pertinent negatives: stool ova/parasites, CBC, ESR, B9, B12, TSH/T4, liver function, lipid panel, ethanol, RPR
- CT head unremarkable

The Dopamine Hypothesis

Common causes of DP include psychostimulant use or psychiatric illness. In the present case, the patient had a schizophrenia-like disorder and concurrent cocaine use, which required involuntarily commitment to the BHU. When presented with ocular DP, providers should develop therapeutic rapport with compassionate dialogue and a thorough workup, as patients may initially resist psychiatric referral. Recent studies suggest improved outcomes with attention to social support and personal wellness.

The treatment mainstays include antipsychotic medications and psychotherapy, which may improve outcomes. A therapeutic alliance with thorough laboratory workup and frequent follow ups can improve outcomes. Outcomes may be further improved with holistic treatment including medication, psychotherapy, social support, and personal wellness.

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References


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