A Rare Case of Occipital Lobe Involvement in Onchocerciasis

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Onchocerciasis, also known as "river blindness", is caused by the nematode Onchocerca volvulus endemic to Sub-Saharan Africa, Central America, and parts of the Arabian Peninsula. Microfilariae are introduced to the skin via the blackfly bite, which then migrate through various avenues to create cutaneous, neurologic and ophthalmic complications.

The ophthalmologist can be the first provider to recognize sequelae of this disease and should direct the appropriate workup including MRI of the brain and referrals to neurology and infectious disease if suspicion remains high. In our patient this was the case. This 12 year old female patient from Africa presented with concerns for intermittent nystagmus of the right eye associated with "staring spells". Unfortunately, after the patient was initially seen and the MRI was unremarkable, the patient was lost to follow up for two years. She then presented with later sequelae involving postneuritic optic neuropathy and a rare finding of occipital lobe involvement and related visual field defects that might have been improved with earlier treatment with ivermectin.

Here we report the first case to our knowledge of occipital lobe involvement in onchocerciasis causing a homonymous visual field defect. This case demonstrates the importance of gathering a thorough travel history in evaluating a pediatric patient with findings of nystagmus and optic atrophy.