

Uncommon eye injury in autistic children has common cause

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The presence of metallic foreign bodies in the eye is an uncommon injury in children, so much so that two children with autism presenting with this injury led to detective work by two physicians that found the common cause. An article published in the current issue of the *Journal of AAPOS*, the Official Publication of the American Association of Pediatric Ophthalmology and Strabismus, documents how a physician from Technion-Israel Institute of Technology and Bnei-Zion Medical Center, Haifa, Israel; and another from the Cincinnati Children's Hospital Medical Center (CCHMC), Cincinnati, OH, discovered that therapeutic swings, commonly used for patients with autism-spectrum disorders, were shedding metallic particles directly into the eyes of the children.

The first patient, an 8-year-old boy, was found to have a corneal metallic foreign body in the right cornea. Previously he had had a corneal metallic foreign body removed by another physician. A meticulous history of the child's activities, taken after this recurrence, revealed that the child spent hours each day on a home therapeutic swing with metallic suspensions.

A 10-year-old boy presented with a similar metallic foreign body in his eye. In this case, the patient had suffered from 3 similar events in the past 3 years. The mechanism of the prior recurrent foreign bodies was not initially understood. This time, in light of the first case, the patient's family was specifically asked about the use of a therapy swing. The family reported on the patient's extensive use of a homemade swing with

metallic suspensions. The family was advised to fix the suspension and have the child use protective eyewear during swing use. There were no recurrences.

Although corneal sensation is usually intact, children with disabilities may have difficulties communicating and complaining about foreign body sensation, with resulting delay in diagnosis. In addition, due to poor cooperation in children, and in particular children with disabilities, examination and foreign body removal often necessitate general anesthesia.

According to author Dean J. Bonsall, MD, Cincinnati Children's Hospital Medical Center and Associate Professor, University of Cincinnati College of Medicine, "Raising awareness of this potential source of eye injury in [children](#) with [autism](#) is paramount. This type of injury is easily preventable by wearing protective eye wear or modifying the swing apparatus."

Editor-in-Chief, JAAPOS, David G. Hunter, MD, PhD, adds, "It is important for parents to know that some swing designs that place a metal mechanism over the child's face could result in tiny pieces of metal falling into their child's eye. Drs. Kehat and Bonsall did some excellent detective work to make this discovery. These are not trivial injuries - metallic foreign bodies can lead to corneal scarring, and in one of their cases it required general anesthesia to remove the metal."

More information: The article is "Recurrent corneal metallic foreign bodies in children with autism spectrum disorders" by Rinat Kehat, MD, PhD and Dean J. Bonsall, MD, MS. The article appears in the Journal of AAPOS, December 2009 (Volume 13, Issue 6, Pages 621-622)

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