Foxtail Ingestion in an Asymptomatic Child: A True Emergency?

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Foreign body ingestion is commonly seen in the pediatric population. The most frequently implicated age range is 6 months to 5 years,¹ and the most frequently ingested objects are coins. Decisions regarding intervention are based on the characteristics of the foreign body (eg, batteries for their corrosive potential, sharp objects for their perforation risk) and their location. Although corrosive entities, such as button batteries, should prompt immediate removal, the management of more atypical ingestions is less definitive. We present the case of an otherwise healthy 3-year-old girl who arrived in our emergency department several hours after reportedly swallowing a foxtail. She demonstrated no clinical signs of acute pain or respiratory distress but complained of irritation in her throat. Given the history of a foreign body ingestion with a specific concern for a foxtail being present, the otolaryngology service was consulted for urgent evaluation and removal. This submission was reviewed and approved by the University of California–San Diego Human Research Protections Program (June 29, 2017).

A “foxtail” is a plant dispersal unit, usually manifesting as a spikelet or cluster of grass that is ubiquitous in the western United States.² Indeed, different plant species produce grasses known colloquially as “foxtails,” but their common detrimental potential is due to their indiscriminate barb-laced tips. The dangers of foxtail ingestions are widely recognized by veterinarians and commonly conveyed to dog owners, as foxtails have been reported to become burrowed in dogs’ nasal turbinates or gastrointestinal tracts when ingested, where they have the potential to traverse deeper and cause serious foreign body reactions/infections, perforations, and even death.³ The mechanism is associated with the conformation of the foxtail’s barbs and sharp leading edge, which results in a one-way trajectory through soft tissue.

Flexible nasolaryngoscopy in our patient clearly revealed the foxtail overlying over the epiglottis (Figure 1), with no evidence of associated laryngopharyngeal mucosal injury. Tongue depression allowed adequate visualization of the head of the foxtail, which was promptly removed with a pair of large alligator forceps. The patient’s father reported that the girl ingested 2 foxtails. Given that only 1 was identified via nasolaryngoscopy, a gastroenterologist was recruited to perform an upper gastrointestinal endoscopy, the result of which was negative. Upon most recent inquiry (approximately 5 months following the ingestion), the patient is well and without associated complications.

Despite never being reported in humans and based on the reported theoretical risk, the possibility of foxtail ingestion should prompt at least consideration of comprehensive

Figure 1. Foxtail ingestion is particularly detrimental due to the presence of inconspicuous barbs at the unit’s distal end. Here a foxtail is seen resting on our patient’s epiglottis and aryepiglottic fold.

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endoscopy (direct laryngoscopy, bronchoscopy, and/or upper gastrointestinal endoscopy) in a timely fashion to facilitate removal and prevent the aforementioned sequelae.

Author Contributions

Bharat A. Panuganti, primary author of this submission; performed the included endoscopy; conducted the literature review; and cooperated in planning this submission; Matthew T. Brigger, coauthor, advisor, and attending physician of record during the described encounter; advised the diagnostic and treatment plan; cooperated in planning this submission; revised the paper to its final state.

Disclosures

Competing interests: None.

References