

Documents

Niset, A., Baert, J., Dupriez, F.

Point-of-Care Ultrasound for the Diagnosis of Pediatric Foreign Body Ingestion: A Narrative Review and Illustrative Case Report

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Emergency Department, Cliniques Universitaires Saint-Luc, Brussels, Belgium

Abstract

Purpose Foreign body ingestion (FBI) is a frequent concern in emergency departments. Clinical guidelines recommend performing plain x-rays as the primary modality of diagnosis. Although point-of-care ultrasound (PoCUS) has increasingly been integrated into the daily practice of emergency medicine, it has been poorly investigated in the diagnostic approach for FBI. This review aims to highlight the current state of PoCUS use for pediatric FBI. The following research question was considered in this narrative review: Is PoCUS useful for FBI management? **Methods** A literature search was conducted to identify articles reporting PoCUS use for the management of FBI. All articles were assessed for quality by 2 reviewers. **Main Results** The 14 selected articles reported 52 FBI cases in which PoCUS successfully identified and located the ingested FB. Point-of-care ultrasound was used either as the primary imaging technique or after positive or negative x-ray findings. In 5 cases (9.6%), PoCUS was the only modality used for the diagnosis. Of these cases, 3 (60%) underwent a successful procedure to remove the FB and 2 (40%) received conservative treatment without complications. **Conclusions** This review suggests that PoCUS might be a reliable modality for the initial management of FBI. PoCUS can locate, identify, and evaluate the size of the FB in a wide range of materials and gastrointestinal locations. Point-of-care ultrasound could eventually become the go-to modality in the case of radiolucent FB, thus avoiding the use of radiation. Further studies are nevertheless required to validate PoCUS use for FBI management. © Wolters Kluwer Health, Inc. All rights reserved.

Author Keywords

bedside ultrasound; foreign body; ingestion; point-of-care ultrasound; ultrasonography

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Correspondence Address

Niset A.Av. Hippocrate 10, Belgium; email: alexandre.niset@student.uclouvain.be

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