External auditory canal foreign bodies are a common problem in the pediatric population and many children present primarily to the emergency department (ED) for treatment. Previous studies revealed the majority of items can be successfully removed in the ED setting. However, an unsuccessful procedure may increase patient anxiety and decrease tolerance of subsequent attempts at removal necessitating the majority of items can be successfully removed in the ED setting. A higher number of attempts to remove the foreign body was associated with a significantly lower odds of successful removal for all patients. Complication rate was significantly higher in the emergency department. There was no statistically significant association between successful removal and patient age, sex, body mass index, or duration of object in the ear canal. The success rate by object type and clinical setting is presented in Table 3. Cotton/paper had the highest rates of successful removal. Beads and rocks had the lowest rates of successful removal although success rate was significantly higher (89%) in the otolaryngology clinic.

Discussion

This study represents the largest to investigate the effectiveness of EAC foreign body practices by point of care and data are consistent with previously reported success rates for foreign body removal. The study is limited by the information available in the medical record and does not account for the level of training of the provider.

Conclusions

Where available, primary referral to an otolaryngologist is recommended for beads or rocks in the external auditory canal. For other objects, referral to an otolaryngologist should be considered after one unsuccessful removal attempt.

References