

Case Report: A Case of a Foreign Body Disguised as an Insect Bite: A Possible Child Abuse

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ABSTRACT

Introduction: Sewing needle is one of the most prevalent foreign bodies reported in child abuse cases. However, foreign body presented as insect bite is extremely rare.

Case Presentation: Our case was a 20-month-old boy, admitted for his right knee swelling and discomfort on walking in the morning of admission. There was only a small red point on the medial side of his knee suggesting an insect bite. Because a metal object was found in his radiologic assessment; further investigation was done because of suspected child abuse. Eventually, a sewing needle was selectively removed in the operating room.

Conclusion: A high index of suspicion is required to distinguish such a rare case. Early diagnosis and appropriate treatment is the cornerstone of the foreign body detection in the emergency department.

1. Introduction

Various cases are constantly reporting worldwide about foreign bodies in association with child abuse. The sewing needle is one of the most prevalent foreign bodies used for child abuse. The physicians should perform a careful physical examination and take more detailed history in investigating rare cases.

2. Case Presentation

Here we present a 20-month-old boy, who was admitted to our emergency department for his right knee swelling

and discomfort on walking. His parents claimed that they recently realized this problem when the infant woke up in the morning. There was only a small red point on the medial side of his knee suggesting an insect bite (Figure 1). However, he manifested claudication and knee swelling. There was no fever or any other systemic presentation in his physical examination. All of the laboratory tests were within the normal range. His radiological investigation revealed a horizontal metal foreign body that was inserted into his soft tissue near the right knee (Figures 2 and 3).

After the admission, his parents wanted to remove the metal and get their son discharged as soon as possible. It appeared that they were fearful or worried about something.

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Figure 2. Metal foreign body that was inserted into his soft tissue near the right knee, AP view

Further investigation by orthopedic and forensic medicine consultation was done due to suspected child abuse. Eventually, a 2.5 cm sewing needle was selectively removed in the operating room (Figure 4).

In our view, two different scenarios are possible in this case. First; the needle may be inserted into the body intentionally as an act of child abuse. Second, the needle was driven to his leg accidentally while the infant was sleeping and lying down. In the end, nothing was conclusively proven.

3. Discussion

Nowadays, various rare cases are reported as child abuse with the sewing needle. Some studies report intracranial sewing needles that have become symptomatic several years later [1]. In another case, Choudhary et al. reported

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Figure 3. Metal foreign body in the soft tissue near the right knee, Lateral view

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Figure 1. Swelling and red point at the medial aspect of the right knee suggesting as an insect bite

penetrating heart injury by using sewing needles in an attempt to suicide [2]. Among the reports, ingestion of the foreign bodies, as well as sewing needle insertion, could be a kind of child abuse in neonates [3].

Similar to our study, Duymus et al. reported an infant with leg fragmented sewing needle presenting with diffuse pain and inability to stand [4]. Fractured sewing needle may be inserted accidentally in the body and presents itself with a delayed pain [5]. Intra-abdominal sewing needle presented as a chronic abdominal pain is also reported as a case of child abuse [6]. In a survey in South Africa, the author explained various foreign bodies related to pediatric trauma in which some confirmed as child abuse [7]. Delayed diagnosis of such foreign bodies may lead to needle migration inside the joint and complication of the surgical plan [8]. Leukfah et al. reported feet and perineum insertion of sewing needles in a case of child abuse [9]. As a case report, a sewing needle was embedded in the sole of an infant's foot and presented with child's distress and hip problem [10].

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Figure 4. Right knee X-ray, post-operation, after removal of the foreign body

4. Conclusion

It is of great value to educate the parents to prevent foreign body related injuries of the children even in the case of traumatic injuries or intentional child abuse. Sometimes it is necessary to look beyond the apparent presentation, especially in the children, as they usually could not localize the pain and explain the detailed problem, so the sixth sensation of the physician may help disclose the mystery. It is also very important to have a high index of suspicion to diagnose the real problem. Early diagnosis and appropriate treatment is the cornerstone of the emergency department management. In this case, delay in correct diagnosis could have led to an infection and even disability of the child. Therefore, it is recommended that all emergency physicians have an open mind in such cases to avoid serious mistakes and misdiagnosis.

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Conflict of Interest

The authors declared no conflicts of interest.

References

- [1] Maghsoudi M, Shahbazzadegan B, Pezeshki A. Asymptomatic intracranial foreign body: An incidental finding on radiography. *Trauma Monthly*. 2016; 21(2). doi: 10.5812/traumamon.22206
- [2] Choudhary S, Pujar Venkateshacharya S, Reddy C. Sewing needle: A rare cause of intra-cardiac foreign body in a 3-year-old child. *Cardiology in the Young*. 2016; 26(07):1425-7. doi: 10.1017/s1047951116000809
- [3] Kazi SG, Habib MI, Afzal B, Khan IQ, Siddiqui E, Aftab M. Nail as a foreign body in a neonate, an unusual presentation at an unusual age. *Journal of Pakistan Medical Association*. 65(3):315-6.
- [4] Duyumu TM, Mutlu S, Turan E, Mutlu H. Unexpected foreign body in the leg of an 8-month-old child. *BMJ Case Reports*. 2014; 2014(jul10 1):bcr2014204699-bcr2014204699. doi: 10.1136/bcr-2014-204699
- [5] Brezinski EA, Eisen DB, Burrall B. Getting to the point: A case of a sewing needle retrieved from the thigh. *Dermatology Online Journal*. 2014; 20(1).
- [6] Alshamrani H, Bakhswain A, Habib Z, Kattan H. Intra-abdominal insertion of sewing needles: A rare method of child abuse. *Annals of Saudi Medicine*. 2013; 33(5):505-7. doi: 10.5144/0256-4947.2013.505
- [7] Timmers M, Snoek KG, Gregori D, Felix JF, van Dijk M, van As SAB. Foreign bodies in a pediatric emergency department in South Africa. *Pediatric Emergency Care*. 2012; 28(12):1348-52. doi: 10.1097/pec.0b013e318276c20e
- [8] Yeung Y, Wong JK, Yip DKH, Kong JK. A broken sewing needle in the knee of a 4-year-old child: is it really inside the knee? *Arthroscopy: The Journal of Arthroscopic & Related Surgery*. 2003; 19(8):e103-e105. doi: 10.1016/s0749-8063(03)00745-x
- [9] Lukefahr JL, Angel CA, Hendrick EP, Torn SW. Child abuse by percutaneous insertion of sewing needles. *Clinical Pediatrics*. 2001; 40(8):461-3. doi: 10.1177/000992280104000807
- [10] Phillips D, Walling AD. An unusual cause of hip pain in a child. *Postgraduate Medicine*. 1988; 84(7):56-8. doi: 10.1080/00325481.1988.11700491