

Intra-abdominal insertion of sewing needles: a rare method of child abuse

Hussain Alshamrani, Amal Bakhswain, Zakaria Habib, Hoda Kattan

From the Department of Pediatrics, King Faisal Specialist Hospital & Research Centre, Riyadh, Saudi Arabia

Correspondence: Dr. Hussain Alshamrani · Department of Pediatrics – King Faisal Specialist Hospital & Research Centre, PO Box 3354 Riyadh 11211 MBC 58, Saudi Arabia · T: +966-11-4647272 Ext. 27763 F: +966-11-4427784 · hsharani@kfshrc.edu.sa

Ann Saudi Med 2013; 33(5): 505-507

DOI: 10.5144/0256-4947.2013.505

The insertion of sewing needles into the abdominal cavity is an uncommon form of child abuse. We report a 2-and-a-half-year-old boy with 2 intra-abdominal sewing needles that were discovered during the evaluation of chronic abdominal pain and vomiting. This case report illustrates the wide range with which abusive injury can present in children. Pediatricians need to be alerted to this newly-recognized and the increasing form of child abuse so that they examine and diagnose their patients appropriately.

Since the first report of child abuse in Saudi Arabia by Al-Eisa¹ in 1991, Saudi researchers have gained more skills and expertise in diagnosing and reporting children with unusual presentations of abuse. Munchausen Syndrome by proxy (MBP) was reported in Riyadh as early as 1993,² and the Saudi published reports now includes a large number of MBP cases with a wide range of manifestations.

Intracranial and intra-abdominal insertion of sewing needles is considered a very rare type of child abuse. A review of the published reports revealed only 11 cases of sewing needle insertions into the abdomen³⁻⁸ as a manifestation of child abuse. Here, we report the first case of intra-abdominal insertion of sewing needles in Saudi Arabia.

CASE

A 2-year-and-6-month-old Saudi boy was brought to a hospital in Arar I by both parents. He had a 2-year history of central abdominal pain with occasional vomiting and intermittent fever. He had a normal bowel motion. The clinical examination, stool analyses, and blood workup were unremarkable, so the parents were reassured most of the times and sent home with some medication. Finally, an abdominal x-ray was done, which revealed two foreign bodies in the abdomen. He was then referred to King Faisal Specialist Hospital & Research Centre in Riyadh from Ar'ar Hospital for surgical intervention.

The parents reported that the abdominal pain started at the age of six months with excessive crying and

fever one day before their housemaid left the country. They suspected that she inserted the needles at that time. Although the parent's accusation against the maid cannot be verified, the parents were found to be concerned and caring for their child and their stories were consistent during the interview. Both parents are highly educated and have a stable job with good income; they have another child who is six months old and he is healthy. There is no other caregiver at home currently.

On admission, the patient looked well and active. He was not in pain or distress and was with normal vital signs. He was at the 5th percentile in weight and had a normal height. The clinical examination revealed a mass on the left chest wall with no visible scars, bruise, or other skin lesions. The abdomen was soft, lax, and non-tender. The investigation revealed normal complete white cell count, hemoglobin, coagulation profile, and renal profile.

The abdominal x-ray (**Figure 1**) showed two radiopaque linear densities projected over the left upper abdomen measuring approximately 5-6 cm in length. No evidence of pneumoperitoneum was observed. The skeletal survey was normal.

The patient underwent laparoscopic exploration and the removal of two foreign bodies under general anesthesia (**Figure 2**). The foreign material consisted of two sewing needles, each around 6.5 cm in length. The first needle was found between the anterior abdominal wall and the colon. The second needle was impeded in the colon. The repeated abdominal x-ray was not suggestive of any foreign body remnant.

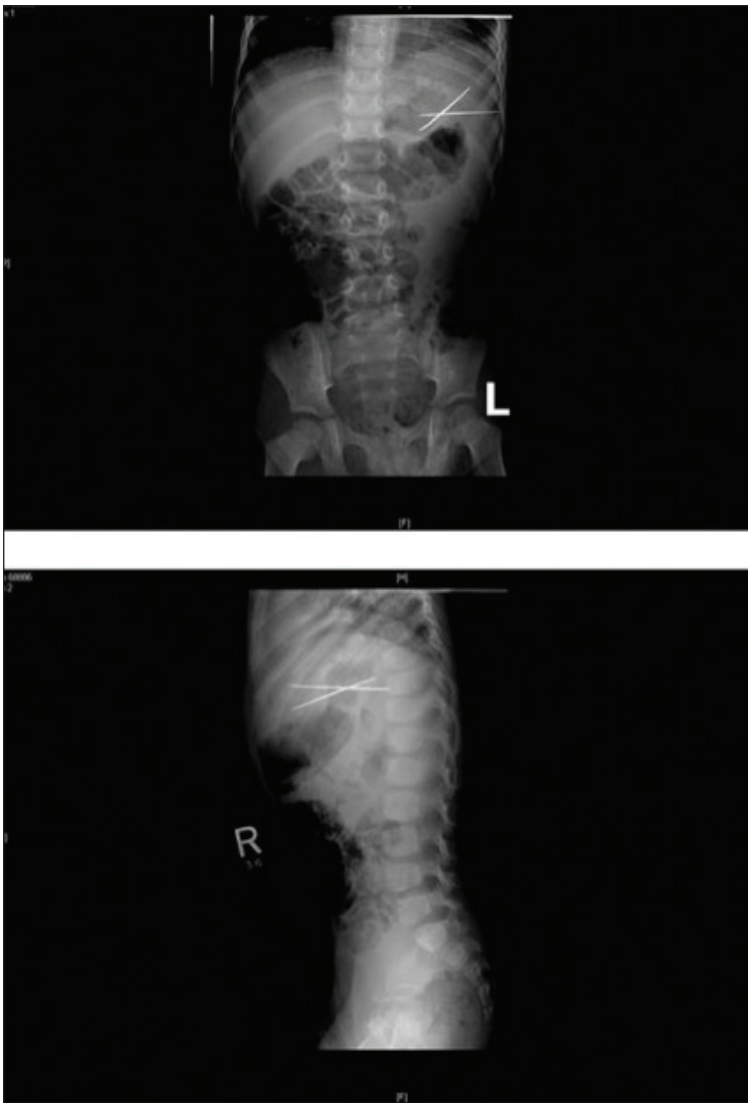


Figure 1. AP and lateral abdominal x-ray showed two radiopaque linear densities projected over the left upper abdomen measuring approximately 5-6cm in length.

The Social Services and Child Protection Team was involved, and the case was reported to the National Family Safety Program. After 7 days, the patient was discharged home with his parents in good general condition.

DISCUSSION

The insertion of needles into the child's body is a rare type of child abuse, attempted infanticide, and, sometimes, a part of cultural practice/belief.³ A few cases were found in the published reports, and most of the reported cases were needle insertion to the brain. It is less frequent in the abdomen,³⁻⁸ chest,⁹ feet, and perineum.¹⁰ Most of the previously reported cases were from



Figure 2. Two sewing needles removed from the abdomen.

Asian^{4,11} and African cultures.³ No cases of abdominal needle insertion were reported in Saudi Arabia.

The presentation of abdominal needle insertion ranges from acute abdomen to asymptomatic, with incidental finding of needles on abdominal x-ray. Most of the cases were seen in small children below 2 years, but 1 case was reported in an 11-year-old boy.⁴

Needles may be inserted by mothers, stepmothers, housemaids, and midwives. In some cases, none of the parents had a clue of who inserted the needles. In our case, both parents believed that the housemaid was the perpetrator.

Needles, if found on x-ray, are surgically removed and complications are treated. However, there is a risk of migration of the needles to other body parts.⁷ It is important to obtain a complete radiographic skeletal survey when one is evaluating young children for suspected abuse.

Keeping a high index of suspicion for the different types and presentation of child abuse is the key to diagnose such cases. Collaboration with protecting authorities is an important part of the management.

This is the first case to be reported in Saudi Arabia and may be attributed to either a low incidence in our country or a failure to report or publish similar cases in the published reports.

CONCLUSION

We described a rare but serious method of child abuse that was reported for the first time in Saudi Arabia.

We hope that increasing awareness regarding the different presentations of child abuse will help in preventing and treating such cases.

REFERENCES

1. Al-Eisa Y. The battered child syndrome: Does it exist in Saudi Arabia? *Saudi Med J*. 1991;12:129-33.
2. Al-Jumaah S, Al-Dowaish A, Tufenkeji H, Frayha HH. Munchausen syndrome by proxy in a Saudi child. *Ann Saudi Med*. 1993 Sep;13:469-71
3. Hadley GP, Bösenberg AT, Wiersma R, Grant H. Needle implantation ascribed to "tikoloshe". *Lancet*. 1993 Nov 20;342:1304.
4. Swadia ND, Thakore AB, Patel BR, Bhavani SS. Unusual form of child abuse presenting as an acute abdomen. *Br J Surg*. 1981 Sep;68:668.
5. Fearne C, Kelly J, Habel J, Drake DP. Needle injuries as a cause of non-accidental injury. *Arch Dis Child*. 1997 Aug;77:183.
6. Ng CS, Hall CM, Shaw DG. The range of visceral manifestations of non-accidental injury. *Arch Dis Child*. 1997 Aug;77:167-74.
7. Azili MN, Karaman A, Karaman I, Erdo?an D, Cavu?o?lu YH, Aslan MK, Cakmak O. A sewing needle migrating into the liver in a child: case report and review of the literature. *Pediatr Surg Int*. 2007 Nov;23:1135-7. Epub 2007 Mar 27.
8. Ibrahim SA, Gaily ZM, Abdelraheem MB, Shummo H, Elhassan M. Child abuse: Under-reported, under-diagnosed and undertreated: Case reports and literature review. *Khartoum Medical Journal*. 2009; 2:222-5.
9. Uguralp S, Harma B, Karaman A. Intrathoracic sewing needle: An unusual penetrating injury in two children. *Journal of Inonu University Medical Faculty*. 2009 Aug;16:121-3.
10. Lukefahr JL, Angel CA, Hendrick EP, Torn SW. Child abuse by percutaneous insertion of sewing needles. *Clin Pediatr (Phila)*. 2001 Aug;40:461-3.
11. A. Amirjamshidi & K. Abbassioun & G. Amirjamshidi. That is why people are frightened of needles! *Childs Nerv Syst* (2009) 25:907-908