

# Non-Sliding Appendix Hernia in an Infant

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## Abstract

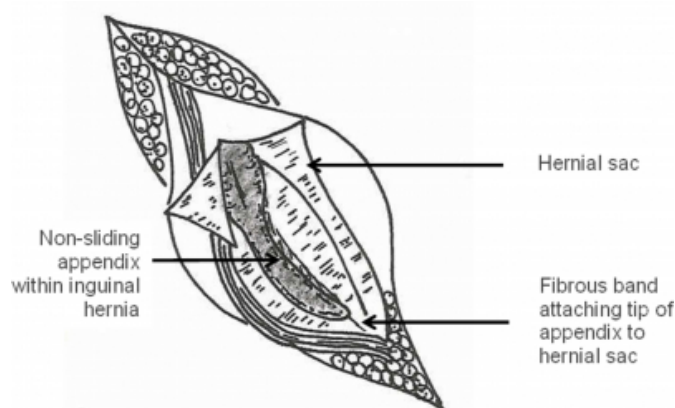
Inguinal hernias are sometimes difficult to reduce. One reason for this is that there may be a sliding component. The appendix has been shown to be part of a sliding hernia and may be adherent to the sac. We report an unusual case in which the appendix passed through a hernial sac and was not part of a sliding hernia. To the best of our knowledge this is not reported.

## CASE REPORT

An 11-week-old male infant, weighing 3.2kg who had been born prematurely at 34 weeks gestation presented with a right inguinal hernia. During reduction of the hernia, it was noted that following release of pressure at the external ring the hernia immediately returned. Surgery was performed using an incision in the skin crease of the right groin. After the hernial sac had been dissected from the vas deferens and pampiniform plexus it was opened, and the appendix was found lying with its tip firmly adherent to the base of an incomplete sac. It was possible to bring the caecal base through the internal ring easily by simple traction on the appendix, thus excluding a sliding hernia (Fig 1).

### Figure 1

Figure 1: Non-sliding appendix within, and attached to, hernial sac



Broad spectrum antibiotics were administered and following division of the fibrous band, appendicectomy was performed and the stump inverted. The hernial sac was closed using continuous absorbable suture.

The infant was discharged the following morning without complications. Histopathological examination showed a normal appendix.

## DISCUSSION

Although generally uncommon, there are case reports in the English literature of appendix within inguinal hernias, both in adults and children [1,2,3,4,5,6]. Not all authors categorised their cases into sliding or non-sliding hernias but all those which were categorised were of the sliding type [1,4,5,6]. A sliding hernia is defined as one in which the wall of the viscus makes up part of the wall of the hernia. In cases where the appendix is involved, most commonly the mesoappendix rather than the appendix itself makes up all or some of the postero-medial wall of the hernial sac [1,6]. Wilson-Storey and Nour reported a male infant with a temporarily reducible sliding appendix hernia [2]. In this case, the appendicular tip was attached to the upper pole of the testis. Akfirat described a male infant where the sliding appendix was adherent to the hernial sac itself [4] and Oguzkurt reported a male child in which a sliding appendix was attached to both testes and sac [1]. The unique feature in the case we have described was that the hernia was non-sliding and contained appendix, the tip of which was attached to an incomplete sac by a fibrous band. This has not been reported so far. Presumably while the processus followed the gubernaculum through the internal ring, which usually occurs during the seventh intrauterine month, the appendix became attached. This gave rise to persistent patency of the processus vaginalis and the clinical finding of incompletely reducible appendix hernia.

The clinician should be aware that when an inguinal hernia immediately rebounds into the scrotum following reduction,

this could be due to fibrous attachment of a viscus such as appendix to the hernial sac. In our case the appendix was not suitable for inversion appendicectomy because the tip was fibrotic, having been attached to the sac by a congenital band, and the appendix itself thin and long. If at operation an appendix hernia is found, it is advised that appendicectomy, preferably by inversion, as well as herniotomy, is considered.

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