Amyand Hernia: A Rare Finding

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We report on a case of an 8 month-old infant, preterm, born at 35 weeks, proposed for an elective right inguinal hernia repair, after observation by a pediatric surgeon. There were no documented incarceration episodes, and no other abnormalities were found on physical examination. At the operation room, after isolating the inguinal hernia sac through a right inguinal incision, a structure adherent to the persisting vaginal process was palpable. The inguinal hernia sac was opened, exposing a non-inflamed cecal appendix, with a normal macroscopic appearance and a distal segment totally adhered to the inguinal hernia sac (Fig. 1). Unable to isolate the two structures without appendiceal damage, an inguinal prophylactic appendectomy was performed, followed by a standard right inguinal hernioplasty. The patient had an uneventful post-operative evolution, remaining apyretic, with pain controlled by oral analgesics and was, therefore, discharged within 24 hours.

Amyand hernia is a rare condition in which a vermiform appendix is found in an inguinal hernia sac, accounting for approximately 1% of all inguinal hernias.[1-3] However, it can be up to three times more frequent in the pediatric population due to the incidence of persisting vaginal process.[3] The incidence of appendicitis is low (< 0.1%),[1,3] but the abdominal sepsis mortality range is as high as 15%-30%.[4] Less than 5% of cases appear on the left, generally associated with mobile cecum, intestinal malrotation or situs inversus.[1,3] Clinical presentation may arise from complications such as inflammation, perforation, or abscess formation. The diagnosis is mostly made intra-operatively, and a pre-operative misdiagnosis of strangulated hernia is frequent, which may compromise the outcome.

Although the classical treatment of Amyand hernia includes appendectomy and high ligation of the hernia sac through the same incision, there is a lack of consensus.[1-2] Those who favor appendectomy argue that reherniation or appendicitis may follow an Amyand hernia repair[1] and, in left hernias, it avoids future delays or mistakes in appendicitis diagnosis.[3] On the other hand, it is argued by some that, in children, a healthy appendix should not be removed, since it might be needed in the event of a urological or digestive disease.[1] All in all, the decision to perform an appendectomy should be made perioperatively based on the appearance of the appendix the adherence to the hernia sac and the patient's medical history.

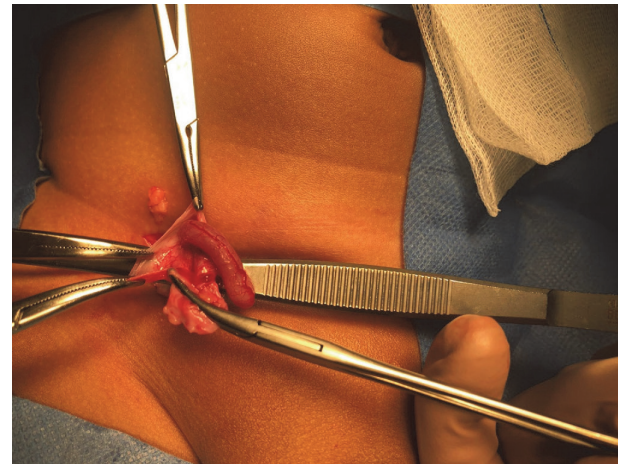

Figure 1. Amyand hernia intraoperative presentation.

Keywords: Appendectomy; Appendix; Hernia, Inguinal/surgery; Infant

WHAT THIS REPORT ADDS

- Amyand hernia is found in approximately 1% of all inguinal hernias but associated appendicitis is low (< 0.1%).
- Less than 5% of cases appear on the left, associated with mobile cecum, intestinal malrotation, or *situs inversus*.
- Clinical presentation may arise from complications, such as inflammation, perforation, or abscess formation.
- The decision to perform an appendectomy should be made perioperatively based on the appearance of the appendix and the adherence to the hernia sac.

Conflicts of Interest

The authors declare that there were no conflicts of interest in conducting this work.

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Confidentiality of data
The authors declare that they have followed the protocols of their work centre on the publication of patient data.

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