

# **Early Detection of Ovarian Inguinal Hernia in Infancy: Importance of Ultrasound**

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#### **Abstract**

Ovarian inguinal hernia is a rare condition in female infants, typically caused by a persistent canal of Nuck, allowing pelvic structures like the ovary to herniate. Early detection is crucial due to the risk of complications such as strangulation or torsion, which may impair ovarian function. Ultrasound, particularly with Doppler imaging, is a key diagnostic tool to identify the hernial contents and assess vascularity. The case of a 6-month-old girl presented with a left inguinal mass showed an ovarian structure with normal blood flow, confirming an ovarian hernia without complications.

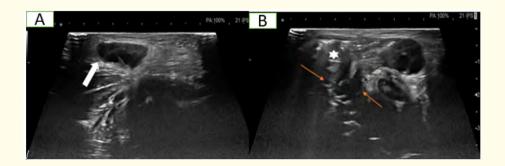
Keywords: Ovarian inguinal hernia; Canal of Nuck; Ultrasound

## Introduction

In female infants, inguinal hernia is a rare condition, occurring approximately six times less frequently than in males. It is most often due to the persistence of the canal of Nuck [1], which may contain pelvic structures such as the ovary. In cases of strangulation or torsion [2], the ovarian function may be compromised. Therefore, early diagnosis through ultrasound is essential to assess the hernial content and its vascular status [3].

## **Image Commentary**

We report the case of a 6-month-old female infant admitted for a left inguinal swelling recently noticed by her parents, which prompted the consultation. Inguinal ultrasound revealed an oval-shaped hypoechoic structure measuring 22 x 12 mm, containing small peripheral cysts suggestive of ovarian follicles. The structure was well vascularized on Doppler imaging, ruling out torsion or necrosis. The findings are typical of an ovarian inguinal hernia through a patent canal of Nuck [2,3].





**Figure A-C:** Shows the parietal wall defect (orange arrow) with an oval-shaped structure containing peripheral follicles within the hernial sac, consistent with an ovary (white arrow).

### **Conclusion**

Early identification of ovarian inguinal hernias in female infants is vital to prevent complications such as torsion or infarction. Ultrasound, especially with Doppler evaluation, is a reliable and non-invasive method for confirming diagnosis and assessing vascular integrity. Prompt imaging ensures timely intervention and preserves ovarian function.

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## **Conflict of Interest**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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