History
12 month old female with vague area of swelling in the right labia that had been present since birth with intermittent fluctuation in size.

Diagnosis
Fibrous Hamartoma of infancy of the labia

Additional Clinical
The area was excised and sent to pathology.

Discussion
Fibrous hamartoma of infancy is a rare, benign soft tissue tumor that typically occurs within the first two years of life. It is most commonly found in the axilla, shoulder, inguinal region, and chest wall and is usually a solitary malformation located in the subcutaneous tissue or dermis. Local recurrence is uncommon and treatment is largely successful by local excision.

The lesions are typically 1 to 8 cm in diameter but have been reported up to 10 cm. The tumor is usually firm and may be affixed to underlying tissue, thus causing concern of potential malignancy. Fibrous hamartoma is composed of three elements; fibrous tissue, adipocytes and primitive mesenchymal cells. Ultrasound is typically non specific and may be useful in excluding hernia. MRI may show stripes of mixed signal tissue and heterogeneous enhancement. The fibrous component appears as areas of low signal intensity on both T1- and T2-weighted images and the fatty component shows characteristic high signal intensity on both T1- and T2-weighted images. It has been suggested that the demonstration of subcutaneous trabeculae of fibrous tissue interspersed with fat in an organized pattern is strongly suggestive of fibrous hamartoma of infancy in the appropriate clinical setting.

Recognition of fat within the lesion, if MRI is performed, helps to narrow the differential diagnosis. At the age of presentation for these tumors a differential for fat containing lesions on MRI should include fibrous hamartoma, lipoma, lipoblastoma, and involuting hemangioma. A differential for a vague mass in the labia in an infant could include; lymphadenopathy, hernia/ovary, hemangioma, vascular/lymphatic malformation, fibrous hamartoma or more aggressive lesions. An MRI could be done for further characterization.

In this case, an MRI was not done. The lesion was resected and shown to be a fibrous hamartoma of infancy.

Findings
Vague area of abnormal echogenicity in the right labia with peripheral hypoechoic area and central relatively hyperechoic area. Vascularity was present on color doppler but was not significantly increased.

Reference
Pediatric and Adolescent Musculoskeletal MRI; A case based approach.
Disclaimer
This teaching site is partially funded by an educational grant from GE Healthcare and Advanced Radiology Services, PC. The material on this site is independently controlled by Advanced Radiology Services, PC, and GE Healthcare and Spectrum Health have no influence over the content of this site.

Content Download Agreement
The cases and images on this website are owned by Spectrum Health. Permission is granted (for nonprofit educational purposes) to download and print materials to distribute for the purpose of facilitating the education of health professionals. The authors retain all rights to the material and users are requested to acknowledge the source of the material.

Site Disclaimer
This site is developed to reach healthcare professionals and medical students. Nothing this site should be considered medical advice. Only your own doctor can help you make decisions about your medical care. If you have a specific medical question or are seeking medical care, please contact your physician.

The information in this website is provided for general medical education purposes only and is not meant to substitute for the independent medical judgment of a physician relative to diagnostic and treatment options of a specific medical condition.

The viewpoints expressed in these cases are those of the authors. They do not represent an endorsement. In no event will Advanced Radiology Associates, PC, Spectrum Health Hospitals (Helen Devos Children's Hospital) or GE Healthcare be liable for any decision made or action taken in reliance upon the information provided through this website.