CASE REPORTS

A rare cause of axillary swelling

Uma causa rara de tumefação axilar

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ABSTRACT

Axillary swelling is a common condition in pediatric age. The most common diagnosis is lymph node swelling, but it can also be caused by soft tissue tumors, vascular lesions, or inflammation of sweat glands. In rare cases, it can be due to ectopic breast tissue (EBT).

A 14-year-old female presented with right axillary pain with one year of evolution and swelling for the past two months, gradually increasing in size, especially during menstruation. Sonography revealed EBT in both axillae, and further study showed duplication of the excretory system in both kidneys. The tissue on the right axilla was excised.

EBT should be considered in the differential diagnosis of axillary swelling in adolescents and young females. When the diagnosis is established, the presence of associated urologic anomalies should be investigated. Clinicians should be aware that EBT can undergo the same pathological changes as normally located breast tissue. Surgical removal should be considered for cosmetic and prophylactic treatment.

Keywords: axillary swelling; ectopic breast tissue; surgical excision; urologic anomaly

RESUMO

A tumefação axilar é um problema comum em idade pediátrica. O diagnóstico mais frequente é linfadenopatia, mas tumores dos tecidos moles, lesões vasculares, ou hidradenite são também diagnósticos possíveis. Em casos raros, a condição pode ser causada por tecido mamário ectópico (TME).

Uma adolescente de 14 anos foi avaliada por dor na região axilar direita durante o último ano e tumefação nos últimos dois meses, com aumento gradual de tamanho, especialmente durante a menstruação. A ecografia evidenciou TME em ambas as axilas e o estudo complementar revelou duplicação do sistema excretor renal bilateralmente. O tecido axilar direito foi excisado.

O TME deve ser considerado no diagnóstico diferencial de tumefações axilares em adolescentes e jovens adultas. Perante confirmação do diagnóstico, devem ser investigadas malformações nefro-urológicas associadas. Os clínicos devem ter presente que o TME pode estar sujeito às mesmas transformações que o tecido mamário corretamente localizado. A remoção cirúrgica deve ser equacionada por razões estéticas e profiláticas.

Palavras-chave: alteração urológica; excisão cirúrgica; tecido mamário ectópico; tumefação axilar

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INTRODUCTION

Axillary swelling is a usual cause of concern among children and adolescents and their parents, frequently requiring medical observation. The most common diagnosis is lymph node swelling, caused by lymphadenitis or lymphoma. Rarely, it can also be caused by soft tissue tumors (as rhabdomyosarcoma, lipoma, or fibroma), vascular lesions (as angiodysplasia or aneurysms), or inflammation of the sweat glands, and by ectopic breast tissue (EBT), an undervalued diagnosis. EBT usually develops as a slowly growing mass and is most commonly identified in young women, with a few cases in the literature reported in adolescents.

CASE DESCRIPTION

A healthy 14-year-old girl presented in consultation with pain in the right axilla with one year of evolution and swelling for the past two months, gradually increasing in size, especially during menstruation. She had the menarche at the age of ten years and used to razor-shave the axillae. The girl denied other associated symptoms and had no relevant family medical history. On examination, a 4 x 4-cm swelling without inflammatory signs, poorly marginated, freely mobile, and slightly painful on palpation was noted (Figure 1). No changes were identified in both breasts or left axilla. The initial differential diagnoses were hidradenitis and lymphadenitis. Further study through sonography of the region detected the presence of mammary tissue in both axillae (Figure 2) and allowed to establish the diagnosis of ectopic breast tissue (EBT). Given this diagnosis, an abdominal ultrasound was performed to search for associated nephron-urologic anomalies, which revealed a parenchymal septum dividing the two sinusial regions in both kidneys, compatible with duplication of the excretory systems. Due to associated pain and cosmetic reasons, excision of the ectopic tissue of the right axilla was performed, followed by macroscopic and histological confirmation of the diagnosis of EBT. The girl maintains regular clinical surveillance of the left axilla.

DISCUSSION/CONCLUSIONS

EBT, or accessory breast tissue, is an uncommon entity affecting 2–6% of females and 1–3% of males, more frequently diagnosed in Asian people (prevalence of 5% in the Japanese vs. 0.6% in the Caucasian population). It presents bilaterally in two-thirds of cases and in the axillae in 70% (other possible locations are the vulva and groin). The condition usually occurs sporadically, but a hereditary predisposition has been reported. Because EBT is under the same hormonal influence as normal breast tissue, it usually appears during periods of hormonal stimulation, as menstruation, pregnancy, and lactation. In the present case, the condition developed in a girl younger than usually reported. EBT results from an error during embryonic development. During the 6th week, the mammary ridges originate pairs of mammary glands, all of which involute around the third month, except one. When more than one pair remains, the condition is named polymastia (presence of accessory glandular tissue) or polythelia (if supernumerary nipples are present). In 1915, Kajava devised a classification system of polymastia that is still used nowadays, in which Class I concerns complete breast, with glandular tissue, nipple, and areola; Class II only glandular tissue and nipple, with no areola; Class III only glandular tissue and areola, with no nipple; Class IV only
In the present case, due to pathological changes, such as inflammation, fibrosis, fibroadenoma, and carcinoma, requiring continuous surveillance. Some authors argue in favor of surgical removal for cosmetic and prophylactic reasons.

**AUTHORSHIP**

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**REFERENCES**


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