

## CASE REPORT

# Supernumerary Breast in an Adolescent Boy

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**W**e present an adolescent boy with unilateral supernumerary breast. It was a V type by Leung Clasification. Despite the average occurrence between 0,22 % and 6% in a normal population we have not had other cases in the last 20 years. The patient was an asthenic boy of sixteen in the IV stage of puberty. Sometimes he felt swelling and tenderness in this breast tissue two years ago. These symptoms became worse two months ago. At the admission he was symptom free. In the right hypochondrium inferomedially he had a nipple and areola with a small part of the glandular tissue. The axilla was empty. After an excision we got a 15x10x 8mm specimen. Pathohistological report described incompletely formed mammary lobule with smooth muscles and lactiferous ducts of nipple in dermis. This was consistent with the diagnosis of ectopic breast tissue. He wanted it removed for esthetic reasons. His hormonal state was normal. All blood checks were normal. Kidney ultrasound was normal. His grandmother had pyelon duplex and frequent uroinfections. As it is known, there is an association between supernumerary breast tissue and renal malformations. Since he did not have it, we think that a routine screening of the uropoetic system should be performed in any patient with supernumerary breast. **Key words:** polymastia, supernumerary breast, renal malformations

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## 1. INTRODUCTION

Polythelia and polymastia are a congenital appearing of the supernumerary breasts tissue. It was known in ancient times. We saw this in an old portrayed picture. Charles Darwin did believe that it was atavism (1). In the past people with accessory breast tissue were often tortured or killed (2).

1% to 3% of males and about 2% to 6% females are affected by this condition. Occurrence rates vary widely in

gender and ethnicity. Occurrence is low, about 0,6% in Caucasians and about 5% in Japanese females (3, 4). Accessory breast has been shown to be associated with several conditions such as kidney and urinary tract malformations and malignancies (5). However, benign and malignant tumors in supernumerary breast tissue are rare (6). Tenderness, swelling, and irritation from clothing, thickening of the axilla, limited range of shoulder motion and fear of malig-

nity are very often the main reason to go to a physician. Symptoms are usually worsened by the onset of puberty and pregnancy (7).

## 2. CASE REPORT

The paper report shows the case of a sixteen years old boy with unilateral polymastia. He was asthenic boy in the IV stage of puberty ( Tanner classification) (8). In the right hypochondrium inferomedially he had a nipple and areola with a small part of glandular tissue (Figure 1). Breast tissue was palpable and painless, measured 15x 10x 8 mm. It was a V type by Leung Classification (9). His accessory breast tissue was situated on the course of normal embryologic development along the embryological mammary streak (milk line) on the right side of the body. The axilla was empty.

Sometimes he had swelling and tenderness in this breast tissue two years ago. These symptoms got worse two months ago. He had redness and irritation from T-shirts on the same place. This time he felt pain when lying on this side. He had a girl friend and he felt ashamed. He wanted it operated not only for esthetic but also for the above mentioned reasons.

When he came he did not have any symptoms. It was the first case in his

family. He had no personal family history of breast cancer. All performed blood checks were normal. Hormonal levels were also normal. Ultrasonography of the normal and accessory breasts was performed. It showed areola and normal glandular tissue, measuring 15 x10x 8mm. Ultrasound of abdomen: liver, pancreas, kidneys, aorta, spleen and lymphatic nodes were normal. Ultrasound of genital tract was also normal. His grandmother had pyelon duplex on one kidney.

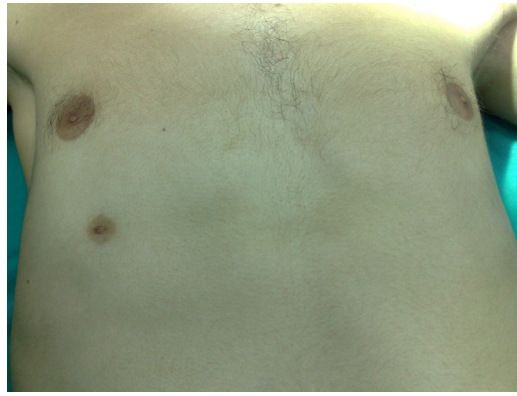


Figure 1. Unilateral supernumerary nipple

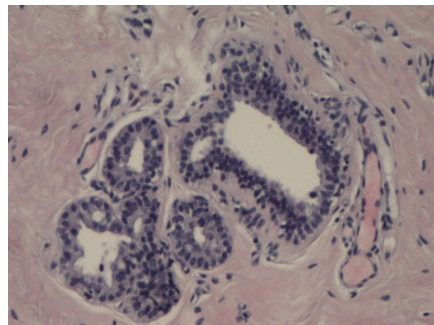


Figure 2. Ectopic mammary lobule in dermis (HE x 40)

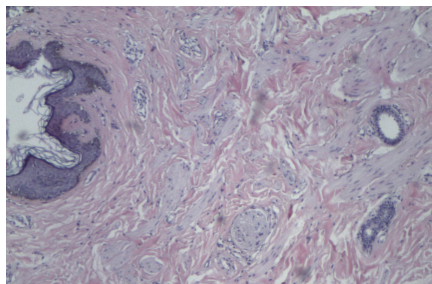


Figure 3. Epidermis and dermis with smooth muscle and ducts off nipple (HE x 40)

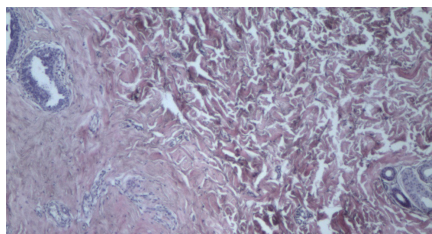


Figure 4. Dilated mammary duct in dermis (left) near adnexal glands (right) (HE x 40).

We excised this supernumerary breast. The surface of the breast was normal. It had a nipple, areola and underlying tissue. After the excision we got a 15x10x8mm specimen. Pathohistological report described: Ectopic mammary lobule in dermis (Figure 2). Epidermis and dermis with smooth muscle and ducts off nipple (Figure 3). Dilated mammary duct in dermis (left) near adnexal glands (right) (Figure 4). The connective tissue stroma was sparse around the ducts. That confirmed diagnosis of ectopic breast tissue.

Operation was performed without any complications and he left the hospital on the same postoperative day.

### 3. DISCUSSION

Accessory appearing of breast tissue is not so common in males. According to the literature the possibility of malignancy is small, but possible. As the patient had irritation of skin, sometimes pain and tenderness in the hypochondrium, he was afraid of inflammation or malignancy. He wanted it taken out. In 1979, Mehes was the first, and after him most of the authors from the last century such as Geodert (1981), Rintala (1982) and Varsano (1984) suggest an association of the accessory breast with renal malformations (renal cysts, duplicities, agenesis) and supported this with their own results. Unlike them many other authors such as Mimoumi

(1983), Robertson (1986), Kenney (1987) and Casey (1996) failed to provide evidence of any relationship. Since his grandmother had pyelon duplex on one kidney we had doubts about any connection between his polymastia and the renal malformation.

Although we did not find any association between the polymastia and the renal malformations and because of the way of the embryonic development of the breast we think that the routine screening of the uropoietic system should be performed in all patients with supernumerary breast tissue (10, 11, 12).

### REFERENCES

1. Kokavec R, Macuch J, Feldeleš J, Ondriaš F. Polythelia is not a mere aesthetic issue, *Acta chirurgiae plasticae*. 2002; 44: 3-6.
2. Grossl NA. Supernumerary breast tissue: Historical perspectives and clinical features, *South Med J*. 2000; 93: 29-32.
3. Patel et al. Accessory Breast Tissue, [www.ePlasty.com](http://www.ePlasty.com), Interesting Case. 2012.
4. Afridi SP, Shamim MS, Rahman SU, Samo KA, Sabir S. Simultaneous ductectasia of accessory and normally located breast. *J Coll Physicians Surg Pak*. 2009 Jan; 19(1): 57-58.
5. Lewis EJ, Crutchfield CE, Prayer SE. Accessory nipples and associated conditions. *Pediatr Dermatol*. 1997; 14: 333-334.
6. Aughsten AA, Almasad JK, Al-Muhtaseb MH. Fibroadenoma of the supernumerary breast of the axilla. *Saudi Med J*. 2000; 21(16): 587-589.
7. Mardešić i sur. *Pedijatrija Školska knjiga*, Zagreb, 2000; pogl 2.2.7.: 40-43.
8. Kajava Y. The proportions of supernumerary nipples in the Finnish population. *Duodecim*. 1915; (31): 143-170.
9. Leung AKC. Familiar supernumerary nipples. *Am J Med Genet*. 1988; 31: 631-635.
10. Urbani CE, Betti R. Abberant mammary tissue and nephrouinary malignancy. *Cancer Genet Cytogenet*. 1996; 87: 88-89.
11. Robertson A, Sale P, Sathyanarayan P. Lack of association of supernumerary nipples with renal anomalies in black infant. *J Pediatr*. 1986; 109: 287-291.
12. Varsano IB, Jasber L, Garty BZ. Urinary tract abnormalities in children with supernumerary nipples. *Pediatrics*. 1984; 73: 103-105.