

# A case of accessory breast in an adolescent female

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## BACKGROUND

- Accessory breast tissue is characterized by breast tissue outside of the breast and can be found anywhere along the milk line from the axilla to the vulva.
- The prevalence of accessory breast tissue is two to six percent of women with the average age of presentation at age 42. Incidence is uncommon in adolescents.
- There are several cases in the literature of adolescents with accessory breasts in the axilla.

## CLINICAL CASE

- A 15-year-old female with no significant past medical history presented with a mass under her left axilla for two years.
- The lesion swelled and became tender during her menstrual cycle. The symptoms resolved after her menstrual cycle ended. She has not had any drainage of the lesion.
- She did not have any similar lesions elsewhere.
- Dermatologic examination found a solitary 4.4 cm skin-colored, poorly-defined, boggy and fluctuant subcutaneous nodule without a central punctum or surface change (Figure 1).
- Ultrasonography showed a 6.4 cm palpable lipoma.
- The lesion was subsequently excised.
- Histopathologic examination demonstrated a slightly hyperplastic, hyperpigmented epidermis. The dermis contained an increased number of smooth muscle bundles with apocrine glands and mammary lobules present (Figure 2, 3).
- This was consistent with a diagnosis of accessory breast tissue.

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## CLINICAL IMAGES



Figure 1

Figure 1: 4.4 cm skin-colored, poorly-defined exophytic subcutaneous nodule in left axilla  
 Figure 2: On histology, ducts and lobules are seen within a fibrous stroma.  
 Figure 3: Myoepithelial cells line a stratified columnar epithelium, characteristic of breast tissue.

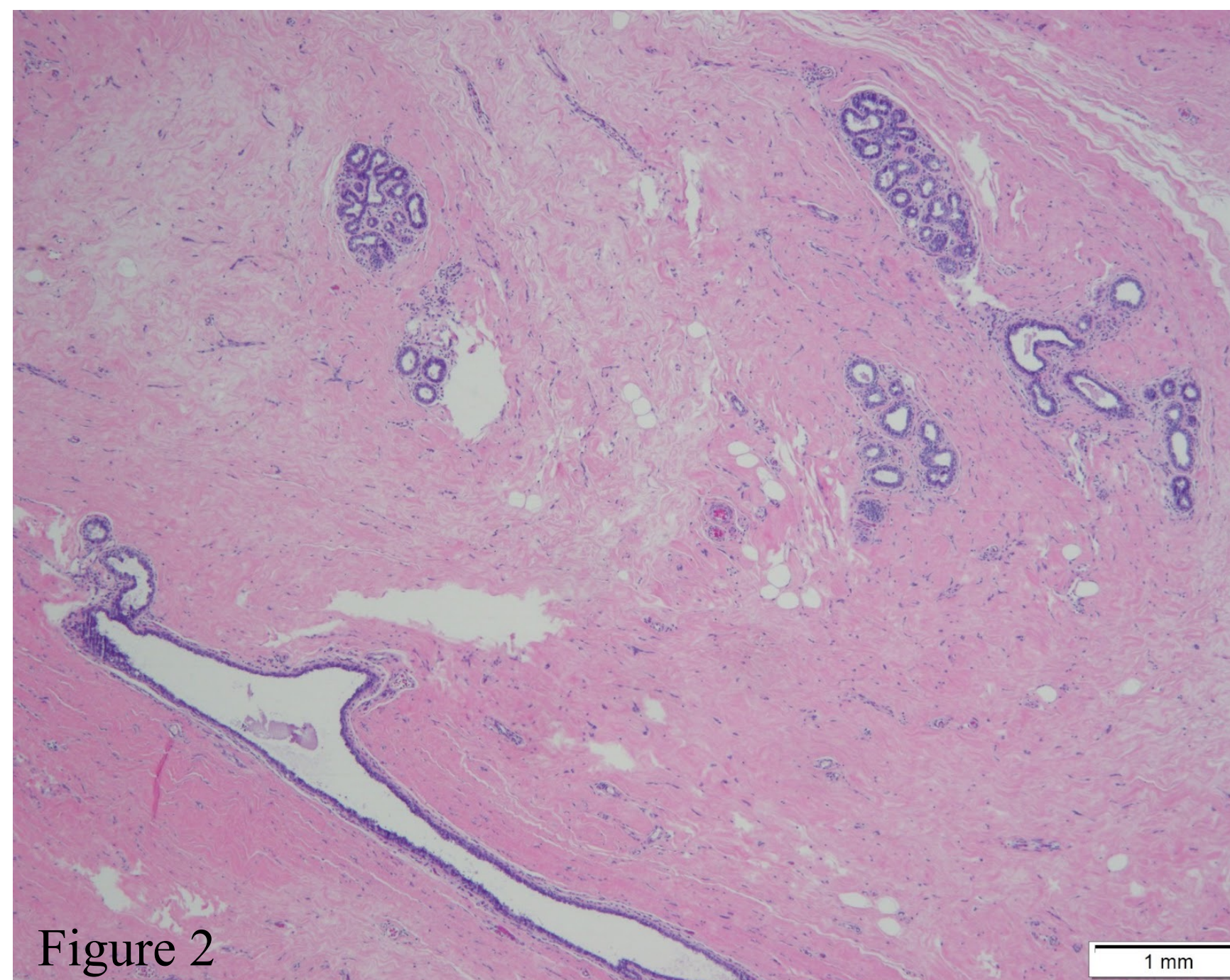


Figure 2

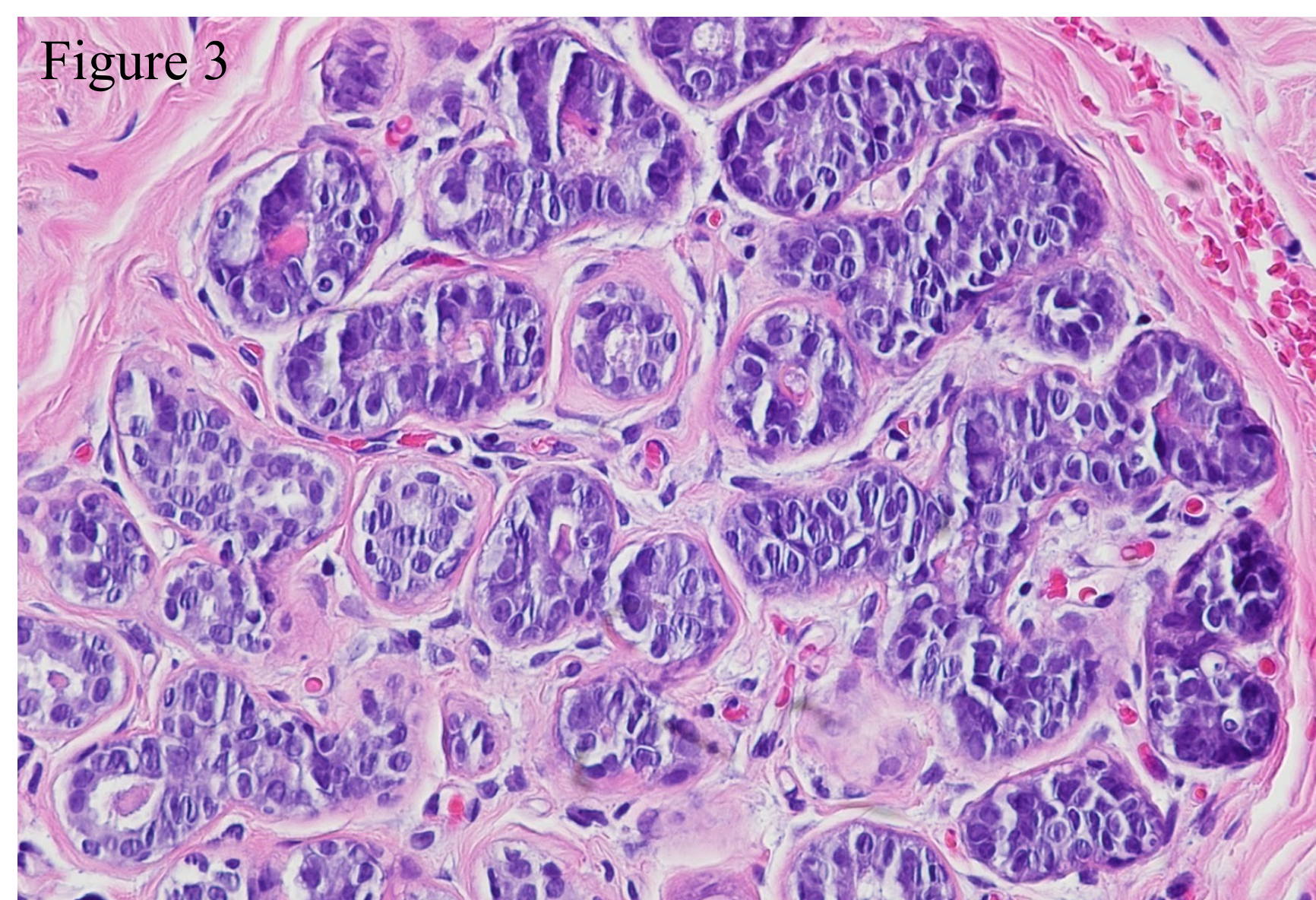


Figure 3

Category	Constituting tissue elements
Class I	Glandular tissue, nipple, areola
Class II	Glandular tissue, nipple
Class III	Glandular tissue, areola, without nipple
Class IV	Glandular tissue only
Class V	Nipple and areola, without glandular tissue
Class VI	Nipple only
Class VII	Areola only
Class VIII	Patch of hair only

Table 1: Kahava's classification of ectopic mammary tissue

## DISCUSSION

- Ectopic mammary tissue is divided into eight classes based on Kahava's classification (Table 1). Our patient is classified as class IV.
- Supernumerary breast structures like areolas and nipples are typically diagnosed at birth, whereas supernumerary breast tissue is not diagnosed until after hormonal stimulation, which is typically seen during puberty, pregnancy, or breastfeeding.
- Of accessory breasts cases, 90% are found in the thorax, 5% in the abdomen, and 5% in the axilla
- Common symptoms include cyclic pain with menstruation, fluctuating size of mass, and tenderness of the ectopic tissue.
- There can be restricted range of motion and increased irritation from clothing.
- Ultrasound would show hypoechoic septate indicative of mammary tissue.
- Diagnosis is confirmed by histopathological studies which show mammary lobules in dermis with smooth muscle, ducts off nipple, and connective stroma.
- Ectopic breast tissue can be surgically removed by direct excision or suction lipectomy depending on the size of the mass.
- Postoperative complications are low but can include seroma, bleeding, infection, remnant tissue, or undesired cosmetic results.
- As with normal breast tissue, ectopic breast tissue can present with benign and malignant pathologies.

## CONCLUSION

- Accessory breasts, though benign, can cause cyclical pain with menstruation, restricted range of motion, discomfort, anxiety, and cosmetic problems.
- It is important to keep it on the differential when evaluating a soft tissue mass that appears in the axillary region.