



¹Division of Plastic and Reconstructive Surgery, University of North Carolina at Chapel Hill School of Medicine

²Division of Advanced Laparoscopy and Pelvic Pain, University of North Carolina at Chapel Hill School of Medicine

BACKGROUND

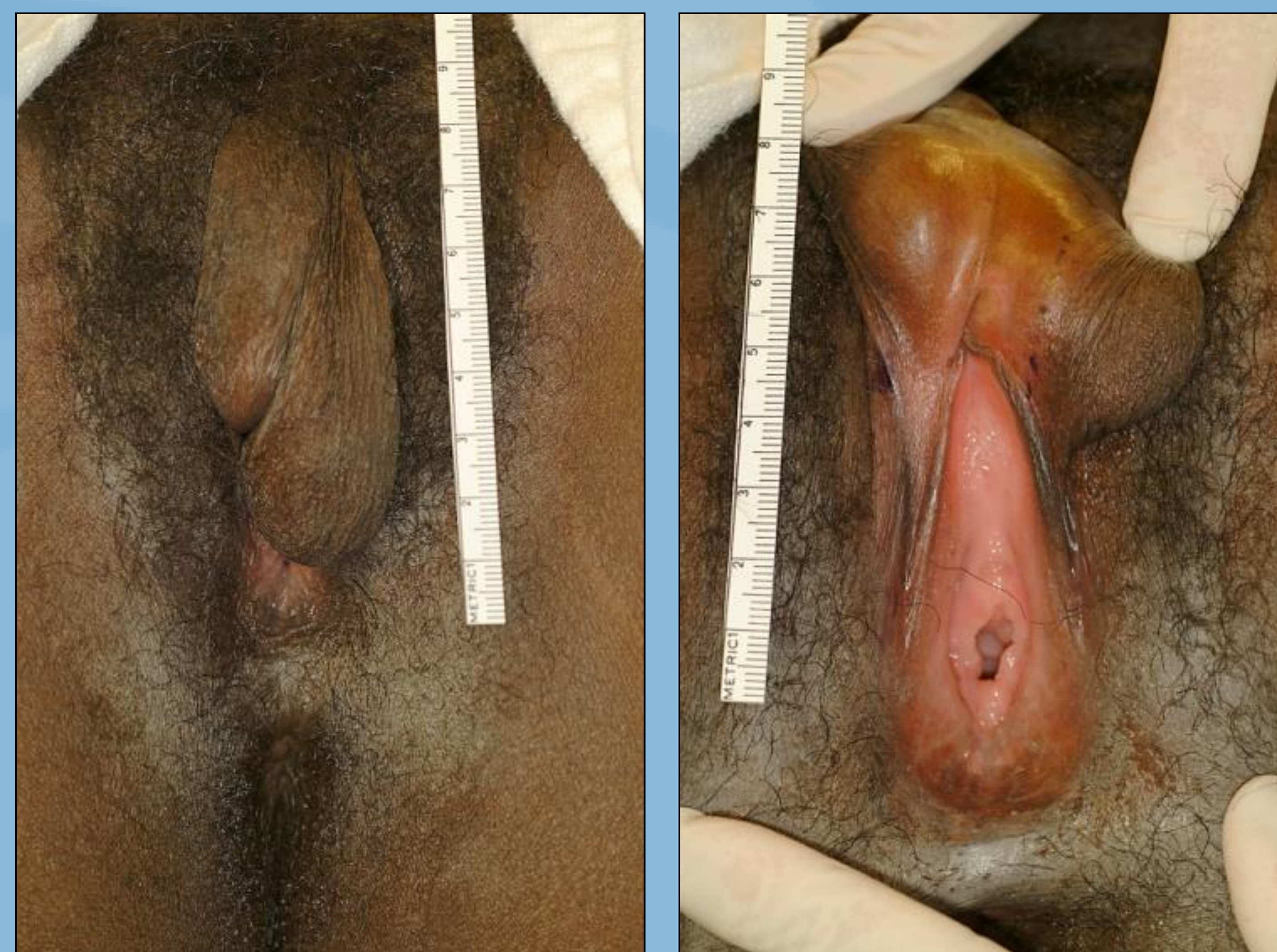
Though extremely uncommon, vulvar breast tissue has been identified and reported in both adolescent patients and during pregnancy. Supernumerary breast tissue is attributed to the failure of regression of remnant milk line during embryogenesis, which subsequently is stimulated during puberty or pregnancy. Though benign, lack of regression in size of the stimulated breast tissue often necessitates a surgical intervention. While plastic surgeons are often consulted on the management of vulvo-vaginal disorders, little is described in the literature with respect to surgical approaches based on established neuroanatomical provisions of the vulvo-vaginal region..

OBJECTIVE

To report a case of a woman with two distinct non-painful vulvar masses that first appeared during pregnancy.

METHODS

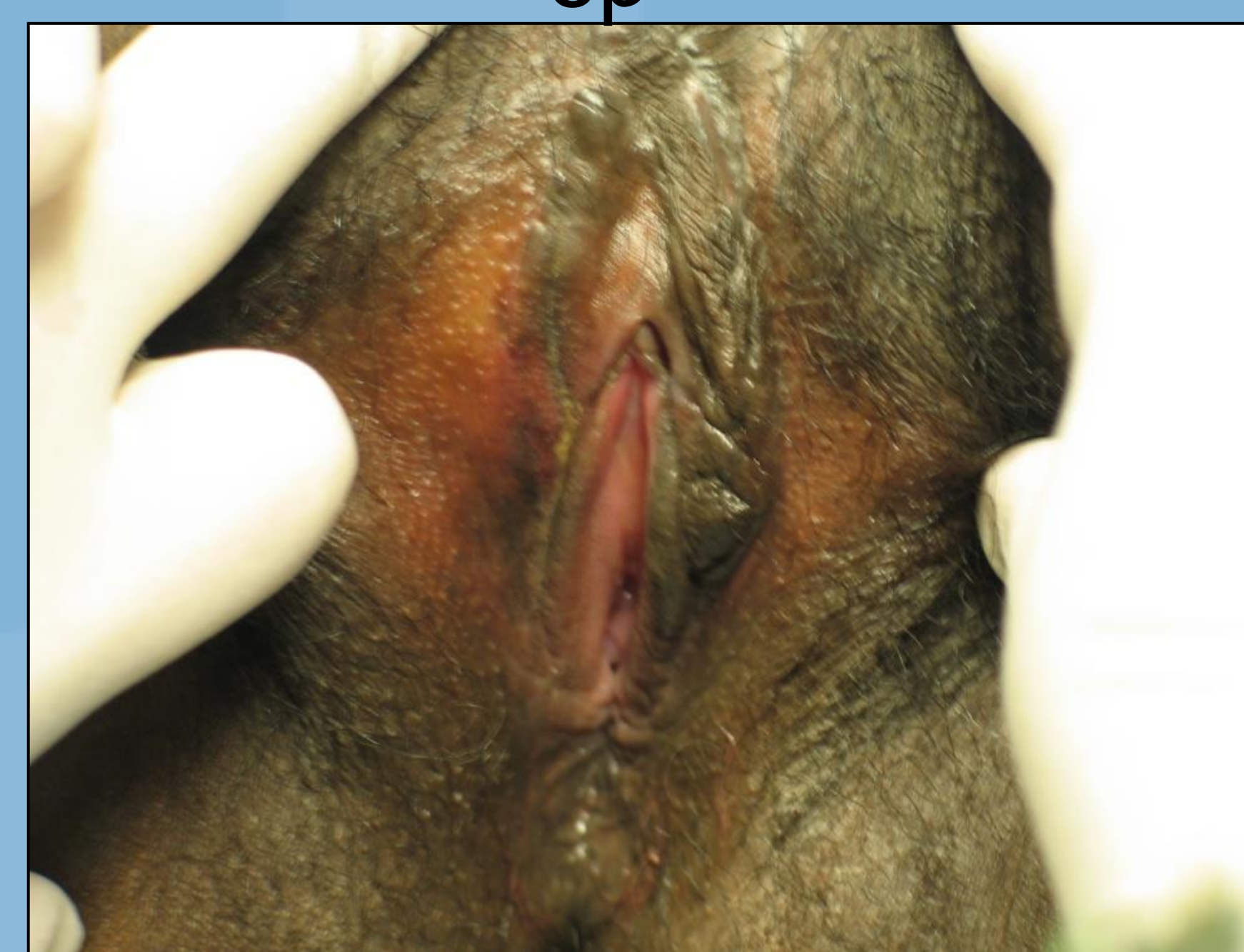
A 23 year-old woman presented persistent labial swelling. She was initially evaluated when she was 8 weeks postpartum. At that time she reported that the left labial swelling began during her pregnancy and became noticeable when she was approximately 20 weeks. Over the course of her pregnancy, the left labial area became increasingly distended. As the area was never painful and was compressible, the decision was made to observe the area expecting that the swelling should resolve after pregnancy. At her 6-week post partum check-up, the swelling had reduced but had not completely resolved. She was noted to have consistent swelling of the labia majora that extended to the gluteal region on the left side and half way through covering the introitus on the right side. She was encouraged to follow up in approximately 2 to 3 months to see if the swelling had completely resolved. Conservative management was chosen because the patient was asymptomatic, was able to have pain free intercourse and was not bothered in a psychological manner.. The patient was seen again two years later and reported that while the swelling had decreased it was still present and she desired definitive therapy.



Preoperative examination



Immediately post-op



5 months post-op

RESULTS

On the day of surgery, sensory mapping of the clitoris and labia minora was performed to insure that the medial incision was on the keratinized epithelium as documented by the absence of central formation (sensation of pleasure with soft stroke) and the presence of prick sensation and sharp sensation. These areas were meticulously demarcated to designate the proximal margin of the incision. On the left side, the keratinized epithelium and submucosal layer were entered and an inflammatory capsule was identified. The capsule was tractioned upward and two glandular sacs were identified. These were tracked and completely removed in bulk. The track extended to the pubic region and there was no evidence of dense vascularity or scarring. In a similar fashion, a parallel incision to the clitoral hood was made on the right and the glandular masses were tracked and removed from the dorsal, ventral, and lateral margins of the incision.

On pathology, each of the masses was identified as benign heterotopic breast tissue with few cystically dilated ducts. There was no atypia or malignancy identified.

Two months after surgery, the patient reported that she had been sexually active without loss of any sensation and she was not experiencing any pain or discomfort. On exam her external genitalia appeared normal and very close inspection was required to identify any residual component of the surgery. Sensory mapping of the labia minora and clitoral area were completely unremarkable.

CONCLUSION

The procedure to remove the redundant labial skin and underlying breast tissue highlights the application of a modified labioplasty approach to the vulvar region utilizing an "inverted U" incision. In addition, using simple bedside sensory testing (a cotton swab), we were able to delineate the anatomical region innervated by dorsal clitoral nerve thus avoiding inadvertent surgical incision in areas associated with female sexual function