

Lymphangioma Circumscriptum (LC): A Case Series Involving Gynecology-Oncology, Plastic Surgery, and Complex Wound Management

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Background

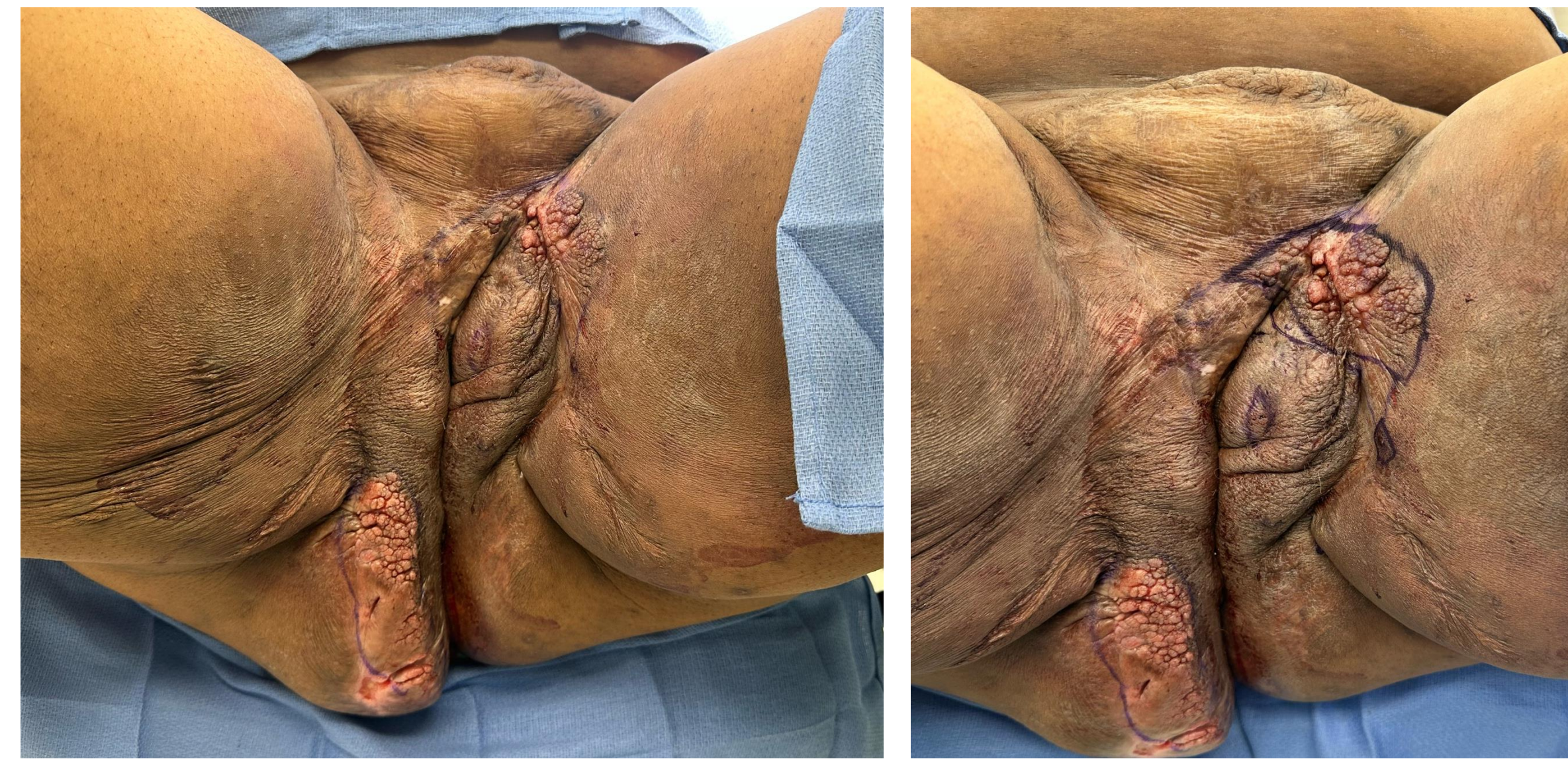
- Lymphangioma Circumscriptum (LC)** is a rare, benign condition characterized by fluid-filled blisters or wart-like growths, often located on the abdomen, axillae, or mouth.
- It results from abnormal development of lymphatic vessels, forming thick-walled vesicles filled with lymphatic fluid, and can be triggered by trauma.
- The condition is frequently misdiagnosed due to its similarity to other dermatologic or infectious conditions.
- LC can lead to significant symptoms, including fluid drainage, chronic discomfort, and potential complications such as lymphatic leakage.
- This case series examines two patients with LC who presented with draining, milky vesicles in the perineum, vulva, lower abdomen, and thighs.
- Multidisciplinary approach:** Collaboration between Gynecology-Oncology, Plastic Surgery, and Complex Wound Management was crucial for successful outcomes.
- The cases highlight the importance of early diagnosis and timely intervention for effective treatment of LC.

Methods

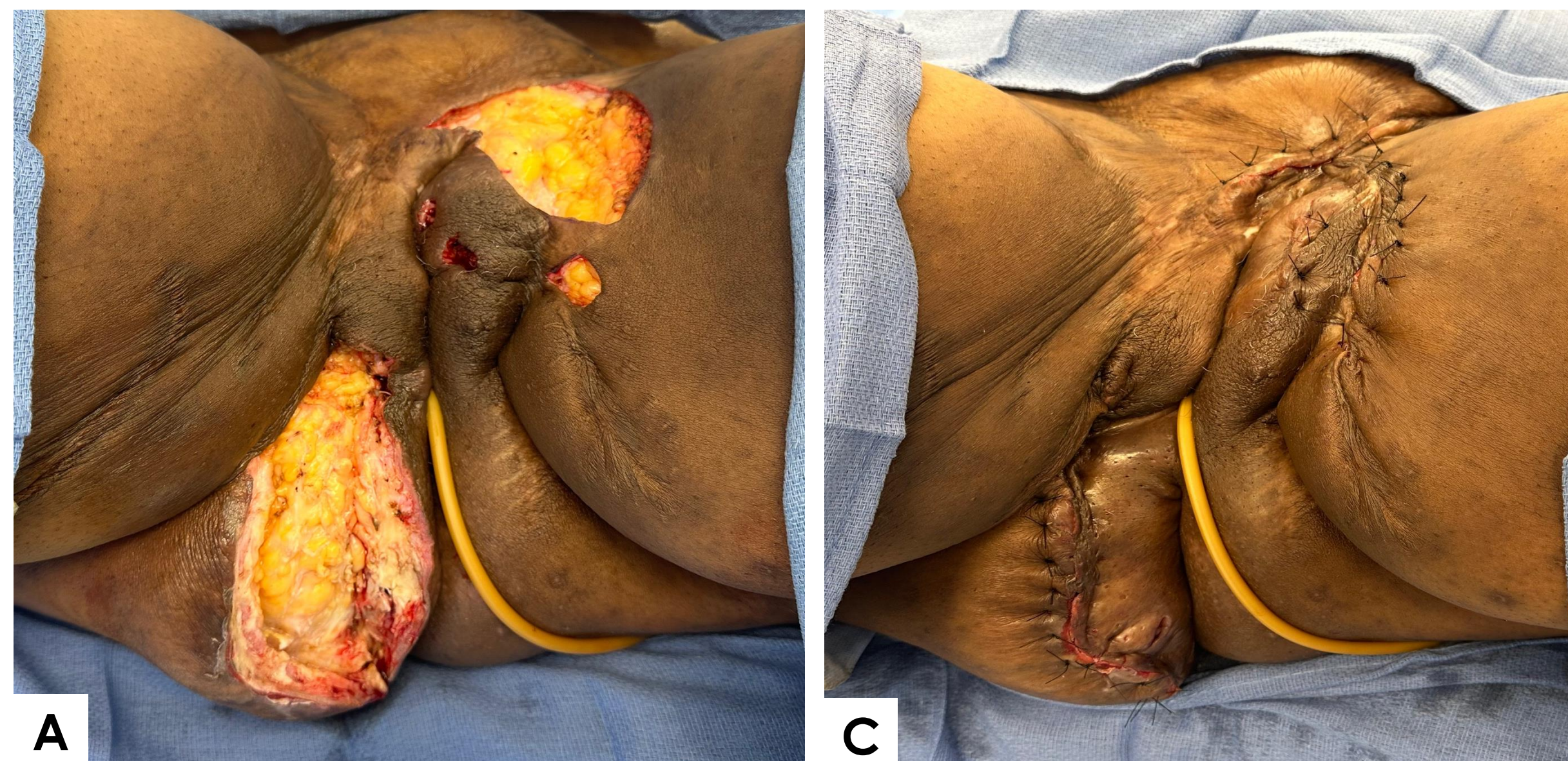
- Patient 1:** 38-year-old female with chronic Hurley Stage 3 Hidradenitis Suppurativa and LC, initially misdiagnosed with HPV.
 - Diagnosis:** Confirmed with biopsy of draining, milky vesicles.
 - Surgical Intervention:** Wide local resection of vulvar, pubic, and thigh regions.
 - Reconstruction:** Flap advancement and complex closure to address extensive tissue involvement.
 - Post-Op Care:** Managed minor superficial wound dehiscence with outpatient care; no recurrence or lymphatic drainage post-surgery.
- Patient 2:** 29-year-old female with a history of trauma from a biking accident leading to LC in the vulva and left thigh.
 - Diagnosis:** LC developed following trauma, presenting with draining vesicles.
 - Surgical Intervention:** Radical left vulvectomy, partial right vulvectomy, and wide resection of lower abdomen, inguinal region, and thighs.
 - Reconstruction:** Flap advancement and reclosure performed following initial recovery complications.
 - Post-Op Care:** Managed lymphatic leakage with over-sewing and doxycycline sclerosis. Compression garments used to reduce lymphatic fluid output.

Results

Patient 1



Pre-operative photos: Patient 1's vulvar, pubic, and thigh regions of chronic Hidradenitis suppurativa and Lymphangioma circumscriptum.



Intra-operative photos: Patient 1's (A) wide local resection of vulvar, pubic and thigh regions. (B) The tissue excised from right mons pubis and left thigh. (C) Complete closure achieved.

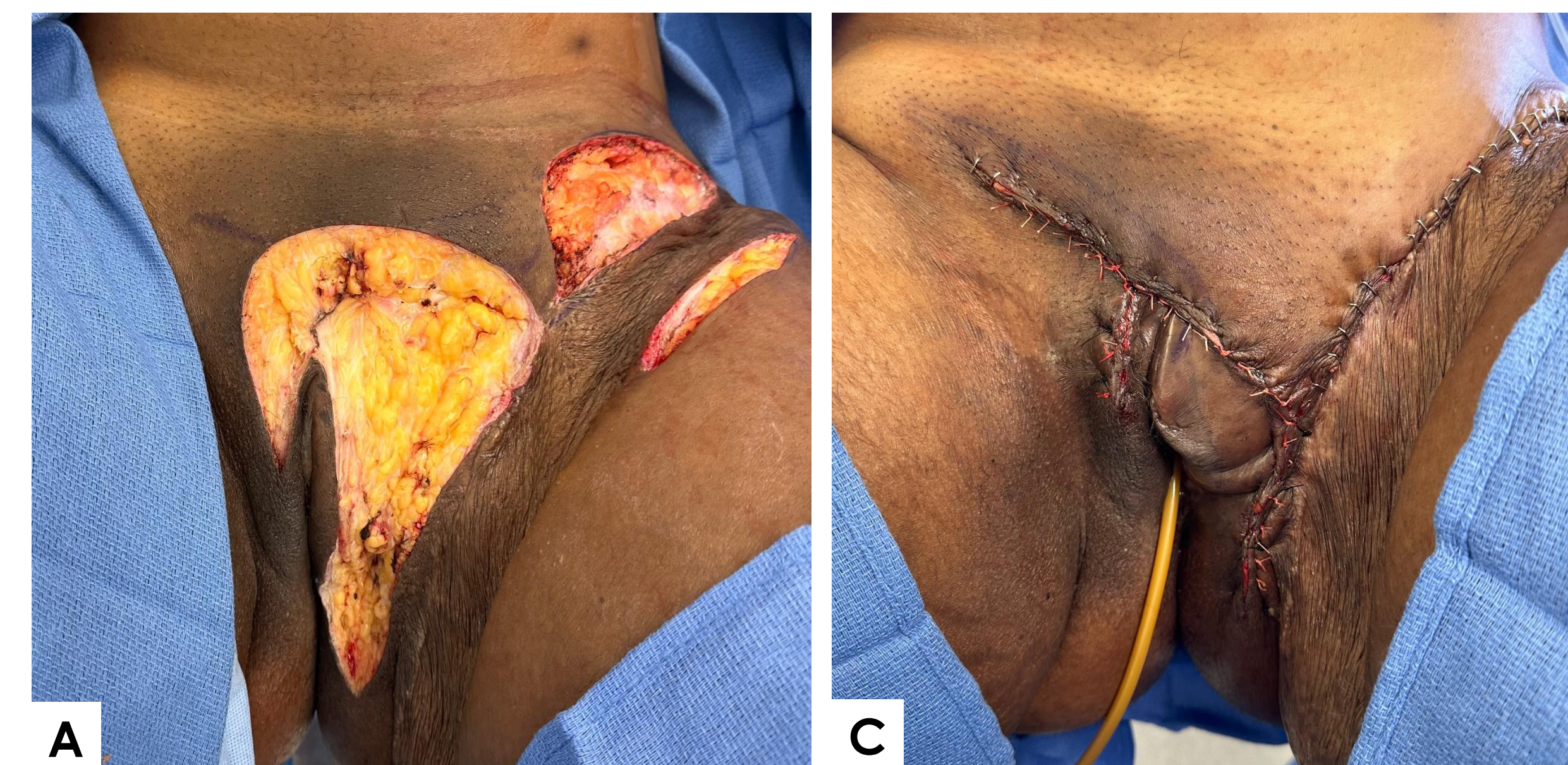


Healed photos: Patient 1's healed (A) mons pubis and pubic regions, (B) bilateral groin and thigh regions.

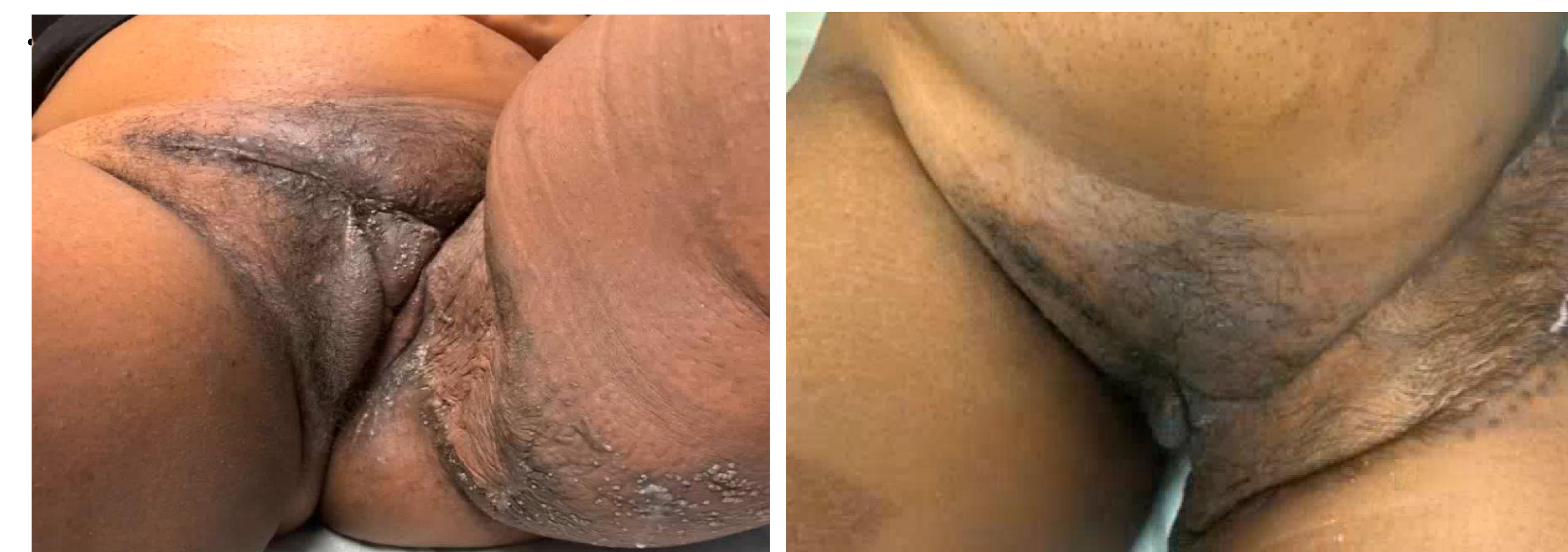
Patient 2



Pre-operative photos: Patient 2's draining Lymphangioma circumscriptum regions of bilateral vulva, lower abdomen, inguinal region and thighs.



Intra-operative photos: Patient 2's (A) radical left vulvectomy/partial right vulvectomy and wide resection of lower abdomen, inguinal region and thighs. (B) The tissue excised from complete left vulva and partial right vulva. (C) Complete closure achieved.



Healed photos: Patient 2's healed pubic region and left thigh.

Key Pearls

Lymphangioma Circumscriptum (LC) can be easily misdiagnosed, often mistaken for conditions like HPV. In advanced stages, it may present with draining, milky-fluid wounds. Early, accurate diagnosis followed by timely surgical intervention is essential to prevent complications and improve patient outcomes

Results

- Patient 1:**
 - Post-surgical outcome: Minor superficial wound dehiscence, which healed with outpatient care.
 - Symptom relief: LC lesions excised, leading to significant improvement in quality of life.
 - No recurrence: No further lymphatic drainage or lesions observed post-surgery.
- Patient 2:**
 - Initial recovery: Patient recovered well but developed minor lymphatic fluid leakage on the inner thigh.
 - Follow-up surgery: Required reoperation for over-sewing, flap advancement, and reclosure.
 - Spontaneous drainage: Two instances of fluid drainage resolved with pressure.
 - Imaging findings: Lymphangiogram revealed abnormal drainage through the left renal lymphatics, with unclear cisterna chyli.
 - Successful healing: Managed with outpatient wound care and compression garments, fully healed after two months.

Conclusion

- Early Diagnosis:** Crucial for effective management of Lymphangioma Circumscriptum (LC) and prevention of complications.
- Multidisciplinary Approach:** Collaboration between Gynecology-Oncology, Plastic Surgery, and Complex Wound Management is essential for optimal outcomes.
- Surgical Intervention:** Timely, well-coordinated surgical resection and reconstruction lead to significant symptom relief and improved quality of life.
- Post-Operative Care:** Comprehensive management of lymphatic drainage and wound healing ensures successful long-term recovery.

References

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