

# When It's Not a Pyogenic Granuloma: Pediatric Vulvar Lichen Sclerosus in Disguise

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## Case Presentations



**Figure 1.** 5mm, vascular-appearing papular lesion at the border of the clitoral hood

Patient 1 is a 4-year-old female with no significant medical history who presented with a 4-month history of a spontaneously appearing vulvar lesion and mild discomfort (Figure 1). Her lesion was biopsied under general anesthesia, and pathologic examination revealed compact orthokeratosis with a homogenized papillary dermis and an underlying band-like lymphoid infiltrate, consistent with lichen sclerosis.



**Figure 2.** 3mm, erythematous, papular lesion at the border of the clitoral hood with adjacent purpura

Patient 2 is a 6-year-old female with atopic dermatitis and a history of transient labial fusion at birth. LS was diagnosed clinically (Figure 2). The patient was successfully treated with 0.05% clobetasol ointment with significant clinical improvement. This was later transitioned to 0.03% tacrolimus ointment.

## Learning Points

- Our cases highlight a potential diagnostic challenge for pediatricians and dermatologists: differentiating vulvar LS from pyogenic granuloma.
- The purpura and epidermal thinning that may accompany LS can create a vascular-appearing lesion that closely mimics pyogenic granuloma.

## Background

- Vulvar lichen sclerosis (LS) is a chronic, inflammatory condition presenting as atrophic, shiny white plaques on the vulva or anus<sup>1</sup>.
- Prepubertal females represent 7-15% of cases.<sup>2</sup>
- Classically, LS presents with genital itching, irritation, pain, purpura, bleeding, dysuria, and/or painful defecation, though patients may be asymptomatic<sup>1,2</sup>.
- Infantile perineal protrusion, a red- or rose-colored soft tissue swelling, has been reported as a manifestation of vulvar LS in young girls, underscoring its variable presentations in childhood<sup>3</sup>.

## Conclusions

These cases highlight an underrecognized presentation of pediatric vulvar LS.

Clinicians should maintain a high index of suspicion for LS in the differential diagnosis of vascular-appearing vulvar papules in young girls, particularly when accompanied by signs of surrounding atrophy, purpura, or a history of irritation or scratching.

## References

1. Kraus CN. Vulvar Lichen Sclerosus. *JAMA Dermatol.* 2022;158(9):1088. doi:10.1001/jamadermatol.2022.0359
2. Bercaw-Pratt JL, Boardman LA, Simms-Cendan JS. Clinical Recommendation: Pediatric Lichen Sclerosus. *J Pediatr Adolesc Gynecol.* 2014;27(2):111-116. doi:10.1016/j.jpag.2013.11.004
3. Cruces MJ, De La Torre C, Losada A, Ocampo C, García-Doval I. Infantile Pyramidal Protrusion as a Manifestation of Lichen Sclerosus et Atrophicus. *Arch Dermatol.* 1998;134(9). doi:10.1001/archderm.134.9.1118