

An Atlas of Lumps and Bumps: Part 7

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Smegma Pearl

Typically, smegma pearl presents as an asymptomatic whitish-yellow nodule over the glans (**Figures 1 and 2**).^{1,2} Smegma pearl results from a collection of smegma accumulated in the subpreputial space of young uncircumcised boys.^{1,2} Smegma is a cheese-like whitish material that is composed of desquamated epithelial cells and secretions of sebaceous glands. Smegma is produced by sebaceous glands located within the mucosal surface of the foreskin near the frenulum.

The accumulation of smegma is simply part of the physiological retraction of the foreskin. Smegma helps dissect the space between the glans and foreskin and also prevents readherence. In addition, smegma helps protect and lubricate the inner lamella of the prepuce and the glands.³ Smegma pearls can be a source of anxiety for parents/guardians and the child. There is some evidence that smegma can

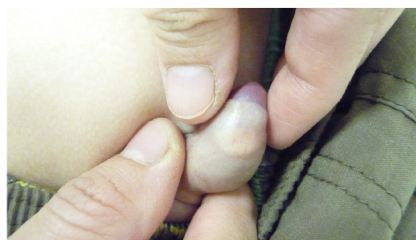


Figure 1.

be carcinogenic, but the subject is still controversial.^{4,5} Smegma is often colonized by many kinds of uropathogens. The most commonly isolated gram-negative bacterium is *Escherichia coli*, and the most commonly isolated gram-positive bacteria are *Enterococcus faecalis* and *Enterococcus avium*.⁶ Rarely, smegma of long duration may harden to form smegma stones.⁷

Penile Lichen Sclerosus

Lichen sclerosus is a chronic, inflammatory, lymphocyte-mediated dermatosis that is believed to be autoimmune in



Figure 2.

nature. Penile lichen sclerosus, or balanitis xerotica obliterans, is a progressive sclerosing dermatosis of the glans and foreskin.⁸ The condition is more common in middle-aged uncircumcised boys and men. Presumably, the occlusive, moist environment under the prepuce may play a role in its development. Chronic exposure of a susceptible epithelium to urine may also be responsible.⁹ Penile lichen sclerosus has been reported following penile piercing with jewelry, trauma, and instrumentation.¹⁰ Koebner phenomenon has been postulated as a causative factor. Penile lichen sclerosus is also associated with obesity, diabetes, coronary artery disease, and tobacco use.¹¹

Penile lichen sclerosus may be asymptomatic.⁸ For those with symptoms, pain, paresthesia, and pruritus are common.^{8,12,13} Pruritus is often worse at night. The lesions typically begin as polygonal papules that coalesce over time into porcelain-white, atrophic, fragile patches and/or plaques with induration and epidermal wrinkling (**Figures 3 to 5**). A sclerotic white, porcelain-like, circumferential, sclerotic plaque on the distal

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EDITOR'S NOTE:

This article is part of a series describing and differentiating dermatologic lumps and bumps. To access previously published articles in the series, visit <https://bit.ly/35J11iv>.



Figure 3.



Figure 4.



Figure 5.

prepuce, appearing as a whitish ring at the distal aspect of the prepuce is typical (Figure 6).^{8,14} In adult men, lichen sclerosus usually affects the prepuce (Figure 3), glans penis (Figure 4), coronal sulcus (Figure 5), and less commonly, the penile shaft.⁸ Rarely, the perianal region may also be affected.^{13,15} In the early stage, there is grayish- or bluish-white discoloration on the glans and/or the inner surface of the prepuce.¹⁰ This condition is often mistaken for vitiligo.¹⁶ As the disease progresses, atrophy of the skin and sclerotic plaques ensue. The prepuce may become tightened and nonretractile.¹⁰ The affected inelastic skin is prone to erosions, ulcerations, and fissuring,



Figure 6.



Figure 7.

especially with penile erection.¹⁰ Purpura, ecchymosis, telangiectases and bullae may also be observed.⁸

In boys, phimosis as a result of scarring of the prepuce is the most common presenting symptom of penile lichen sclerosus.⁸ Other symptoms include dysuria, deviation of the urinary stream, and ballooning of the prepuce during voiding.

Complications of penile lichen sclerosus include paraphimosis, urethral stenosis, difficulties with sexual intercourse and/or even malignant transformation (eg, squamous cell carcinoma, Figure 7).^{8,16} Penile lichen sclerosus can have a significant impact on quality of life.

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