A 28 year old white man presented to the dermatology clinic because of raised, yellow-white coloured skin lesions on the glans of his penis that had been increasing in number over two years. Repeated attempts had been made to cure the affected areas with topical antimycotic drugs, antibiotics, and virostatic agents.

Macroscopic inspection showed a penile mucosa covered by densely aggregated yellow-white, minute papules (figure). Lesional swabs to look for colonisation with bacteria, fungi, or viruses were unremarkable.
Questions

1 What is the likely diagnosis?
2 What is the causative pathological mechanism?
3 What treatment would you recommend?
4 Which differential diagnoses have to be considered?

Answers

1 What is the likely diagnosis?

Short answer
Fordyce’s spots (also known as Tyson’s glands or ectopic sebaceous glands).

Long answer
The figure shows numerous yellow-white sharply circumscribed macules and papules with a diameter of 1 mm or less localised on the mucosa of the glans, which are characteristic of
Fordyce’s spots. Other areas that can be affected are the prepuce, penile shaft, scrotal sac, labia minora, mamilla, eye lid, vermilion region of the lip, and the buccal mucosa.

2 What is the causative pathological mechanism?

Short answer

They are caused by sebaceous glands that are not linked to hair follicles.

Long answer

The alterations seen in Fordyce’s spots are caused by sebaceous glands that are not associated with hair follicles. Such glands are asymptomatic anatomical variants that may erupt or become more prominent during puberty.

3 What treatment would you recommend?

Short answer

Treatment is unnecessary.

Long answer

Ectopic sebaceous glands can affect the patient’s self esteem, and patients may consult a doctor because of fear of an emerging, probably malignant, disorder. Reassurance is usually all that is required.

4 Which differential diagnoses have to be considered?

Short answer

Pearly penile papules, milia, flat warts, condylomata acuminata, and planar xanthomas.

Long answer

Ectopic sebaceous glands have to be differentiated from several disorders. Pearly penile papules are skin coloured smooth round papules, typically localised at the corona of the glans penis.

Milia are small retention cysts that appear as 1 to 2 mm pearly white or yellow papules. Lesions may occasionally occur on the penis or mucous membranes.

Flat warts (verrucae planae juveniles) are characterised by flesh coloured or brown, flat topped papules measuring 2-5 mm in diameter. They occur primarily on the face, neck, arms, and legs. Flat warts are caused by viral infection of the skin and mucosa by the DNA containing human papillomavirus.
Condylomata acuminata are flesh coloured, soft, verrucous papules measuring 1-5 mm in diameter. Affected areas include the glans penis, penile shaft, scrotum, vulva, and anal region. Human papillomavirus is the causative organism.

Planar xanthomas are yellow lipid containing macules and papules, which may occur anywhere on the body.

**Patient outcome**

The benign nature of the alterations was explained to the patient in detail. All topical treatments were stopped.

**Notes**

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**Footnotes**

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**References**


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