ABSTRACT

BACKGROUND
Smegma stones are an uncommon entity. A very few cases, mainly in elderly uncircumcised males, have been reported in the literature. We report a case of a 16-year-old boy with a protuberance over the dorsum and lateral side of the middle part of his penis. On retraction of the prepuce, 10 yellow lumps were exposed and then removed manually. These lumps were Smegma stones, which had formed over many years due to accumulation of smegma under the prepuce. This article highlights the importance of genital hygiene in such cases.

KEYWORDS
Smegma Stones.


BACKGROUND
Smegma is a physiological whitish substance that occurs on the glans penis and foreskin of males. It should be removed at regular intervals by thorough washing. In most men it is odourless, but it has been reported to harden into ‘smegma stones’ in men with extremely poor hygienic habits. Cases of smegma stones are rare in children. Here, we present a case of smegma stones in a 16-year-old virgin boy.

CASE REPORT
A 16-year-old male presented to our OPD with swelling over his penis for the last one year, which was gradually increasing in size. The swelling had recently become slightly tender, which had prompted the consultation. He denied having any sexual contact ever and was otherwise well with no systemic symptoms. On examination, an ill-defined protuberance covering the dorsal and lateral aspects of the mid penis was evident (Figure A).

Retracting the prepuce was slightly painful, however, revealed discrete hard yellowish sub-preputial lumps (Figure B, arrow). These lumps were not adhering to the prepuce or glans. Complete retraction exposed around ten such lumps with some erythema of the underlying glans and inner surface of prepuce. The lumps represented smegma stones (Figure C), which had formed over the years as the patient had never retracted his prepuce. Use of mild corticosteroid over five days settled the tenderness.

Figure A

Figure B
DISCUSSION

Smegma is a whitish substance that is present on the genitalia—the inner cavity of the foreskin in men and the folds of the labia minora and clitoris in women. Wright states that smegma is produced from minute microscopic protrusions of the mucosal surface of the foreskin and that living cells constantly grow towards the surface, undergo fatty degeneration, separate off and form smegma.\[3\] Newly produced smegma has a smooth, moist texture. It is thought to be rich in squalene\[4\] and contain prostatic and seminal secretions, desquamated epithelial cells, and the mucin content of the urethral glands of Littré.\[5\]

Smegma helps to keep the glans moist and act as a lubricant during sexual intercourse. It should be removed through normal washing processes, but in some cases when hygiene is low or washing under the foreskin difficult, smegma can undergo local calcification forming calcium soaps, thus producing a nidus for stone formation. The accumulated smegma can also cause bacteria under the foreskin to increase and raise the risk of infection. It is postulated that these calculi in the prepuce can originate from either inspissated smegma with lime salts trapped into the phimotic prepuce or infected stagnant urine or migrated calculi from the upper urinary tract into the preputial sac.\[6]\ Neglected preputial stones may generate serious complications such as bilateral hydronephrosis and acute renal failure\[6\] or even penile carcinoma.\[7\] Smegma can be prevented by washing the genitals with warm water at least once a day. This applies to both males and females. It is particularly important for uncircumcised males to wash underneath their foreskin, as this is where smegma can build up.

REFERENCES

[3] Wright J. How smegma serves the penis. nature’s assurance that the uncircumcised glans penis will function smoothly is provided by smegma. Sexology (New York) 1970;37(2):50–3.