CASE OF GONORRHOEAL KERATOSIS.

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CONSIDERING the prevalence of gonorrhoea, we may say that gonorrhoeal keratosis is very rare. This case is the sixth recorded in our country, and consequently deserves to be brought to notice.

The patient is aged 25, a regular soldier, of seven years' service. He contracted gonorrhoea early in 1914 and was treated at Curragh Hospital with irrigations. After four months' treatment he was back on duty and well by July, 1914. He came to France in October, 1914, and remained perfectly well till May, 1915. He exposed himself to infection again, and was admitted to hospital on the fifth day of his second attack, May 18th, 1916. On admission he was sharply ill—temperature 102° F., acute gonorrhoeal arthritis of the right ankle and great toe, muco-purulent urethral discharge. The prostate was hard and the right lobe nodular, suggesting chronic prostatic trouble. Both seminal vesicles were also indurated and readily palpated. Four days after admission the right wrist became acutely painful and swollen, and nine days after admission there developed acute arthritis of the left knee, which within thirty-six hours had to be tapped. Over 100 c.cm. of thick serous fluid was withdrawn; no gonococci were found in the fluid, but pus cells were present. Patient was treated with urethral irrigations and vaccines—mixed gonococcus and staphylococcus. Local treatment to joints consisted of radiant heat and massage, and at the end of ten weeks he was sent to a convalescent home well.

Skin Condition.

Three days after admission peculiar small nodules were noticed on the right foot, which was greatly swollen, and as the patient's general condition was very bad, and he was anaemic, it was thought he was developing septic lesions of the skin with cellulitis. Under treatment the swelling of the foot and ankle subsided, but the skin lesions gradually became more numerous and extended to the left foot. In ten days the lesions had become quite distinct. They were hard and shotty, and when pricked with a needle were found to be solid. The accompanying photographs show the appearance and distribution of the eruption twenty days after admission. As the case was under observation from beginning to end, all the various phases could be traced, from the smallest lesion noticed to those fully developed. The small group of lesions shown in Fig. 2 on the dorsum of the right foot appeared three weeks after admission. Briefly, the eruption was discrete, and consisted of very small conical nodules or crusts, very hard, and varying in size from that of a large pin-head to that of a pea. The smallest lesions were more or less conical in shape, with a firm, horny feel, and giving the impression of being just under the epidermis, which remained intact over the small cone and normal in colour. From this stage to that of the largest there were all grades.

As the lesions increased in size the epidermis became whitish over the cone, and gradually gave way at the apex, exposing a small hard brownish crust, in colour and consistence very like beeswax. When the epidermis had completely given way a loose fringe of epithelium encircled the underlying hard cone, and the cone itself could be easily picked out from the underlying Malpighian layer, leaving a smooth pinkish area on which the base of the crust had been attached. The striking

way in which these hard cones could be picked out, even in the very earliest lesion, by artificially breaking through the covering epithelium, left no doubt that they developed between the Malpighian layer of the skin and the corneal layer. There was no bleeding on artificially removing these crusts. In the larger lesions, where the covering layer of epidermis had practically disappeared, these crusts looked as if they had been simply cemented on to the skin. Excepting a few of the largest lesions, where the crusts were disc-like—three-eighths of an inch in diameter and about one-eighth of an inch thick—they were all fairly uniform, conical, with a flat base. Some were perfectly limpet-shaped, with a concave base resting on a convex elevated surface. All the crusts were hard and dark brown in colour.

The parts affected were chiefly the soles and borders of the feet. A small group of lesions is seen on the dorsum of the right foot; some lesions were present on the dorsal and plantar surfaces of the toes; there were none on the hands or any other

part of the body. As the patient improved the crusts gradually fell off, and the skin returned to its normal condition. Cultures were taken from under the crust but no growth resulted. No initial erythema or telangiectasis was observed, as described by Williams in his case, and there was no inflammatory areola in any of the lesions. The lesions were practically all discrete, and there was no generalized plantar keratosis.

A very notable feature in all the cases that have been recorded is the simultaneous presence of gonorrhoeal arthritis, and mostly in men

who have had a previous attack of gonorrhoea. The question naturally arises, What is the relation between the joint condition and the

skin eruption, and what is the relation to the specific gonococcus? Are both manifestations of the presence of the gonococcus in the joints and tissues of the skin? Are they due to toxins emanating from the gonococcus, or are both trophic changes due to the gonococcus or its toxins acting through the central nervous system?—a view suggested and favoured by Jeanselme. He had noted in his cases that the reflexes in the lower limbs were greatly exaggerated.

Another notable feature is the rapid improvement of the skin lesions with the general

progress of the patient. In none of the cases described has the gonococcus been found in the fluid aspirated from the joints.

BIBLIOGRAPHY.

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Graham Little and Hayne: *Trans. Roy. Soc. Med.*, Dermatological Section, 1915.
Williams: *BRITISH MEDICAL JOURNAL*, October, 1914.
McDonagh: *Biology and Treatment of Venereal Disease*, p. 424.

LORD RHONDDA will contribute an introduction to the new edition of Sir William Crookes's book on *The Wheat Problem* which Messrs. Longmans will shortly publish.

THE special aural board of the Ministry of Pensions has now completed arrangements for the treatment of deafened soldiers and sailors at the Central London Throat and Ear Hospital, Gray's Inn Road, London, W.C., and at the Queen Mary Hospital, Stratford, Essex. The clinic at Stratford will open on the evening of October 10th, and the clinic at the Central London Hospital on the evening of October 12th. Applications for permission to attend the clinics are to be made to the local War Pensions Committees.

FIG. 1.

FIG. 2.