FAVUS (ACHORION QUINCKEANUM) OF THE MALE GENITALIA.

BY

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It is stated in some dermatological textbooks that favus is more often seen in Scotland than in England. If so its incidence south of the border is decidedly infrequent.

FIG. 1.—Photomicrograph of section of scutulum, showing spores and mycelium of *Achorion quinckeanum* in contact with epidermal cells.

I have never seen it in private practice, and in my hospital clinic and in the skin clinic of the Glasgow education authority, where large numbers of patients pass through my hands, it is of rare occurrence. In but few of these cases has the glabrous skin been affected. In that distribution if the typical sulphur-coloured scutula are present—there is nothing else like them—the diagnosis is strikingly obvious. Occasionally, however, some of the lesions simulate ringworm, but in the cases where there has been no involvement of the scalp which have come under my notice and been diagnosed as favus, I can recall none in which scutula were absent from all the lesions.

Variation from typical distribution of skin diseases may be a confusing factor in diagnosis, especially in those affections devoid of pronounced characteristic signs. In other diseases the signs may be so convincing that the unusual topographical feature presents no obstacle to the identification of the affection.

Early in July of this year a patient presented himself at my hospital clinic complaining of an affection of the penis and scrotum. To my surprise—for there was no mistaking the disease—he was the subject of favus in those sites. The left half of the scrotum showed typical umbilicated yellow scutula, and the same region of the penis similar lesions, which, however, did not exhibit the same degree of umbilication. It was the first time that favus in the genital region had come to my notice, and it

occurs with such extreme rarity in that situation that I feel no further justification is needed for reporting this case. There were other lesions present, but none of them showed typical scutula. Two, on the inner aspect of the left thigh, which were evidently extending and coalescing, presented an erythematous appearance, and one of these showed a ring-like development, suggestive of vesiculation, and some scaling. Another lesion was pustular, and one showed black dots, due, possibly, to some adventitious element masking the yellow colour of minute developing scutula.

The causative fungus in the preponderating number of cases of scalp favus in man is the *Achorion schönleinii*. Sabouraud has recorded 200 scalp cases due to it. There

FIG. 3.—Photomicrograph of *Achorion quinckeanum* from culture of scutulum on Sabouraud's medium. Note dichotomous branching of mycelium. Spores of varying size and shape—mainly oval, with one end rather more rounded than the other.

are, however, other varieties of achorion met with, mainly in the lower animals. It has been advanced that those cases in the human subject in which the scalp is unaffected are due to one or other of these lower animal varieties.

Be that as it may, there were no scalp lesions present in this particular case.

A scutulum was broken up and portions sown on Sabouraud's media, and Dr. Ernest Dunlop of the pathological department made a section of another of which an excellent photomicrograph was taken. The cultural attempts were successful and showed growths of *Achorion quinckeanum*, a variety found in the cat and mouse. The accompanying illustration shows the cultures, which are white and finely powdery in appearance, with a tendency in some to acquire an acuminate shape. The photomicrograph of the cultures shows a dichotomously branching mycelium and spores of varying size and shape, mainly oval, some with one end more rounded than the other.

FIG. 2.—Cultures of *Achorion quinckeanum*—white, finely powdery, and showing at bottom of first and third tubes a tendency to acuminate shape.

Inquiry elicited that there were mice in the patient's home, but no cats. I was unsuccessful in getting any of the mice. How had the patient become infected? No other member of the family had it. It appears that he had bought some shirts shortly before he had noticed the lesions. He wore an undervest. The first lesions to appear were the genital ones. The custom of tucking in the anterior lower part of the shirt about the inguinal and genital regions and the drawing forward of the tail

of the garment brings this article of underwear into very intimate contact with those parts where heat and moisture are favourable to fungus growth. It is possible that the new shirt may have borne the contagion into the house; on the other hand, a fawcett mouse from the household group may have contaminated it. This is mere conjecture, for many possible ways of infection suggest themselves. Apropos of this, I once treated three bachelor brothers for *trinea cruris*. The first, whose epidermal scales microscopically examined showed the *Epidermophyton inguinale*, had used a strange closet—of the earth variety, I believe—when out shooting. Doubtless the other two had contracted the disease from one of the water-closets in their country house, common to them all.

The scutula were removed, and all the lesions cleared up within a fortnight under salicylic acid and ammoniated mercury ointments of appropriate strength. It was found necessary to employ a boric acid and calamine lotion occasionally, after washing off the ointment, owing to the sensitiveness of the skin of the parts.

THE RUNNING EAR.*

BY

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THE running ear is the term used by the mothers of England and the man in the street for designating the condition of suppurative otitis media, which has as its sign the outflow of pus from the external auditory meatus. There is no greater reproach to the science and practice of otology than that a number of persons of all ages are going about suffering from this serious complaint. There would appear to be no clear conception in the minds of many practitioners, of the public, and of some of the public authorities of the true significance and seriousness of the condition. For example, the Board of Education in its annual report for the year 1922 (p. 63) states that arrangements have been made for the treatment of "uncomplicated otorrhoea at *minor ailments clinics*" (the italics are mine), and states that the treatment is carried out by a school nurse at the school or the clinic. On certain representation being made to the Board, the reply was that "cases of discharging ears are as a general rule suitable for treatment by the school nurses at the school clinic under the direct supervision of the school medical officer, and the local authority should arrange for this course to be adopted." School medical officers are thus prevented from sending all their cases of suppurative otitis media to clinics held by otologists, and this procedure is in force at the present time. When such is the attitude of a responsible public body, is it any wonder that there is widespread misunderstanding of the condition in the minds of many medical practitioners and in those of the public?

Needless to say, every child or adult suffering from suppurative otitis media has a very serious complaint and should be under the care of an otologist. The disease, if carefully treated, is eminently curable. If it is not cured, every fresh nasopharyngeal affection may light up, not merely middle-ear disease, but mastoid infection, which may spread to the brain with dire results.

The prevention of the running ear should, therefore, first engage our attention, and with this object in view the tympanic membrane should, as a rule, be incised in all acute middle-ear conditions at an early date. It is regretted that the Association of School Medical Officers does not seem to have taken up the challenge that was thrown down by a correspondent in the *British Medical Journal* on April 20th, 1929, asking for an authoritative pronouncement on the question of paracentesis in such conditions. Otologists have declared themselves in favour of this procedure, but the Association of School Medical Officers has made no comment.

If suppurative otitis media occurs in spite of paracentesis, then it should be treated as a serious disorder, preferably by putting the patient to bed, or at any rate

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confining him to the house and thoroughly disinfecting the external auditory meatus and, as far as possible, the tympanum. Personally, I employ frequent cleansing with 10 volumes of hydrogen peroxide, followed by pipetting out with warm boric lotion, drying, and finally instilling 1 in 60 carbolic in spirit drops. If this method, or one of the many similar methods followed by individual otologists, fails to effect a cure within a short period, zinc ionization should be tried; it will, in certain cases, give good results, but the ear must be efficiently cleansed before its application. Too much reliance must not, however, be placed upon ionization, and provided the pharynx, nasopharynx, and nose have no infective areas (needless to say, if they have they should be cleared away) then the mastoid antrum should be explored, and it is for early exploratory operation that I would plead. If the simple methods of treatment fail, I do not think there is the least use in going on with them, for, as I have already stated, the focus of the trouble is then in the mastoid antrum, which communicates with the suppurating middle ear. There is, unfortunately, in the minds of many practitioners of medicine, certainly in those of the public, a dread of mastoid operations, surviving from the time when they were attended by a high mortality, and the only recognized methods were boring a hole in the mastoid antrum, and the so-called radical operation. The former was usually insufficient; the latter usually went a great deal too far.

In the vast majority of the more recent mastoid infections it will be found that a modified Schwartz operation will be sufficient to effect a cure. By a modified Schwartz I mean an operation that Schwartz never contemplated—namely, the removal of the entire diseased area, including sometimes the upper parts of the bridge, and especially the tip cell, and then either treating with bipp or draining, according to the condition present. The antrum and the cells may be full of pus; on the other hand there may be no pus, but the bone may be completely dead and a dry caries or osteomyelitis found. If the latter condition is present it will be sufficient to remove the diseased bone, thoroughly dry the area, and completely close the posterior wound, the patient being discharged in about ten days with primary union. In those cases which have been drained, the drain may be removed at varying periods, according to the condition, but usually the time should not be prolonged. In the more chronic cases it will be necessary to perform a modified radical operation, and for this my procedure is as follows. Having removed all diseased bone, including the bridge, down to near the tympanic membrane, I split the soft meatus, insert a large tube in the area of the obliterated mastoid antrum, close the back wound, and either carry out the necessary after-toilet through the tube or, for this purpose, remove the tube and replace it when the toilet is completed. This toilet consists of washing out the middle ear with bland substances—for example, normal saline or colloidal silver—and blowing air through. In this way all disease of the middle ear is got rid of and the tympanic membrane heals. The tube is then withdrawn, and the area, which is already granulating freely, will be entirely closed. There is no need to retain this posterior opening in the soft meatus. Such an operation should, I believe, replace the old radical one nearly always; the patient subjected to it acquires no deformity and his hearing remains good or normal.

The student and young practitioner must be trained on new lines. He must no longer be taught that the sign of mastoiditis is a swelling behind the ear—which in the vast majority of cases should never be allowed to appear—and that the only operation short of liberating the collection of pus is to remove the entire hearing apparatus of the tympanum. On the contrary, he must be taught that the smaller operation, carried out early, should be regarded as a means of removing disease, and that the larger operation, while removing disease, should aim at conserving the function of hearing. He should also be taught that a mastoid operation properly carried out is practically never a menace to life, but as a rule can be done rapidly with first-class results, giving relief to symptoms and leaving behind no deformity. It is to be hoped that he will then appeal to the otologist much more frequently to cure the "running ears" of his patients.