preventive measure? At the least, the patient feels better for it; and, as recurrences must have a microscopic beginning, surely a treatment which can check an established growth must in many cases enable the system to repel an invasion which has as yet gained little force.

In conclusion, I feel that I must, even at the risk of prolixity, hark back once more to the case of the patient suffering from chronic recurrent carcinoma of the breast. Have you ever asked yourselves what happened to such patients before the days of x-ray clinics? I will tell you what happened. For months, sometimes for years, they lay and festered in their homes, the victims of horrible ulceration, more loathsome than leprosy. I can myself remember entering homes where the stench of the cancer patient not only permeated the whole house, but seemed to rush into the street, overwhelming the visitor before he had even crossed the threshold. Such cases must now be rare indeed, and that they are to-day the exception is due to the care bestowed on them in the out-patient x-ray clinics of the general hospitals. The aim of these clinics is to keep the breast patient upon her feet—free from pain, cheerful in mind, and physically unobjectionable—until a final rapid internal spread of the disease removes her after but a few weeks of bedridden life. On the whole this aim is accomplished, and it can be accomplished more readily now than was the case even two or three years ago. This is a record to be proud of. There is a cry at present of "new lamps for old"; but let us remember the Arabian Nights tale, and be quite sure that the old lamps are valueless, and the supply of new ones adequate, before we throw them away.

SYCOSIS BARBAE.*

BY

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THIS paper is limited to a consideration of the subject of cocco-genic sycosis or sycosis barbae, a simple staphylococcal infection of the hair follicles of the beard area in the adult male. Sabouraud¹ has referred to sycosis barbae, with reason, as "un des opprobres de la dermatologie." Textbooks unite in describing the condition as essentially a chronic process, difficult to cure; and discuss treatment, with little enthusiasm, in terms of years. It is wise that the views of the many upon such a malady should be ventilated from time to time, and it is the object of this paper to promote such a discussion.

PATHOLOGY.

An external infection of the hair follicles by the *Staphylococcus pyogenes aureus* produces inflammation which proceeds to abscess formation within the follicle, and is confined, in the main, to that portion of the follicle superficial to the neck of the sebaceous gland. The deeper portions of the follicle are rarely involved. This is the pathology of the condition, and it should be emphasized, first, that the infection is probably always of external origin, and secondly, that there appears to be no further complicating factor in the first instance, no question of a particular constitutional factor, and no question of any local or general state of susceptibility.

***DIAGNOSIS.**

A correct diagnosis at the onset of any infective process affecting the beard area is of prime importance. The differential diagnosis is not a difficult one, and it is useful to bear in mind here that sycosis barbae—presenting punctate follicular abscesses with surrounding erythema—was so named on account of its resemblance to the yellow pips set in the pink pulp of the inside of a fresh fig. Impetigo, ringworm, seborrhoeic dermatitis, and seborrhoeic sycosis are the conditions most likely to present difficulty in diagnosis.

Impetigo is a vesicular dermatitis primarily, as opposed to a pustular folliculitis, and this should be sufficient

differentiation. If treated with ointments, impetigo is commonly the forerunner of sycosis barbae, but this is the fault of treatment. Ointments tend to spread the eruption, to increase the period of infection, and so, by creating a chronic infective condition of the skin, favour the development of a secondary staphylococcal folliculitis. Impetigo should be treated with antiseptic lotions or powders.

Ringworm of the beard area is usually of the kerion type, and individual lesions—somewhat resembling boils—are red and boggy. The suspicion of ringworm is confirmed if infected hairs can be removed from their follicles without experiencing any resistance whatsoever. The fungus can be demonstrated microscopically.

Seborrhoeic dermatitis and seborrhoeic sycosis, unlike sycosis barbae, never affect the beard area alone. The moustache area is commonly affected, and the eyelids invariably present a chronic blepharitis. The scalp, the eyebrows, and other hairy parts of the body, as well as the flexures, may be involved. The importance of the diagnosis here lies in the recognition of the seborrhoeic diathesis and the special susceptibilities of the patient, which factors must be borne in mind in treatment.

ETIOLOGY.

Sycosis barbae is admittedly a disease confined, in the main, to the hospital class of patient, whether seen in private or hospital practice. Why should this be so?

Is it not likely that the solution of this first problem may have some bearing also upon the mysterious chronicity of this disease? For it is mysterious that a simple staphylococcal infection of the superficial parts of the hair follicles should resist treatment as does sycosis. Focal sepsis, sensitization, the excited or the uncleanly hand of the barber, the use of blunt razor blades, and even the colour of the hair, have all been called in to explain these mysteries, or rather the mystery of sycosis barbae as a whole; but they do not seem in any way to bear upon these two outstanding features—of class distinction and of chronicity.

Inquiry will elicit the fact that almost 100 per cent. of the sufferers from sycosis barbae are persons in the habit of shaving irregularly. He who shaves daily, and he who shaves not at all, rarely falls victim to the barbers' rash. It is this distinction in the personal toilet habits of the upper and lower classes which accounts for the incidence of the disorder being low in the one and high in the other. The factor of daily shaving is not merely of interest from the etiological standpoint, but is of the utmost importance in treatment. That hairy surfaces which are allowed to grow a stubble of hair are prone to irritation and infection is commonly observed; the boil or carbuncle on the nape of the neck is a daily instance of this.

While improper toilet, as well as improper treatment, may be a cause of chronicity in sycosis barbae, there are two other features which must not be overlooked. Septic infections discharging externally—particularly if adjacent to the beard area—may constantly reinfect the beard. Fissures at the angles of the mouth and about the nose, infections of the vestibule of the nose and of the external auditory meatus, infected teeth and gums, boils, whitlows, etc., commonly contribute to the chronic nature of a cocco-genic sycosis, and must be cured before that condition will resolve.

Finally, in cases of long standing, the development of sensitization in the tissues affected may have some small bearing upon the course of the disease, but it is of little importance in treatment until the infective process has been eradicated. That the factor does enter into the constitution of these cases is shown by the following, cited from my own practice.

A man, aged 27, had previously suffered from sycosis barbae, which had at long last yielded to treatment. He presented himself, at this time, complaining of persistent irritability and redness of the beard area, which had replaced the old sycosis. The non-infective, papular, erythematous eruption seen was diagnosed as a sensitization phenomenon, and cleared after the administration of three small doses of x rays. About twelve months later the patient received a course of staphylococcal vaccine treatment for an infection in the upper respiratory tract, and the first of these injections caused a relapse of the papular erythema of the beard area which persisted throughout the course.

* A paper read in the Section of Dermatology at the Annual Meeting of the British Medical Association, Manchester, 1929.

TREATMENT.

To be effective the treatment of sycosis barbae must be based upon a consideration of the etiological factors which have been stressed here; further, it must have due regard for the pathology of the disease, and must show a proper appreciation of the physiology and the anatomy of the part treated.

The first essential is that the patient must shave daily, no matter what the state of the beard area or the stage of the infection. For the comfort of the patient, he should use a sharp razor.

Secondly, any infective lesions other than the sycosis—fissures, infections of the vestibule of the nose, and of the external auditory meatus, etc.—must be treated, and must be cleared up before a cure of the sycosis can be expected.

Thirdly, a strongly caustic, antiseptic lotion must be applied with a view to eradicating the infection from the follicles; a weak application is not effective. The lotion should be dabbed on and allowed to dry on. Wet lint dressings, masks, etc., should not be employed.

Many prescriptions meet these requirements; one of the best is the eau d'Alibour of the St. Louis Hospital, Paris, which contains copper sulphate 4 grains, zinc sulphate 6 grains, camphor water to the ounce. At first this may be applied at night only, and a lotion or liniment of calamine may be used by day.

Finally, at no time and at no stage throughout the treatment of a case of sycosis barbae should an ointment be prescribed. There can be very little doubt but that the use of ointments in sycosis barbae—and in a number of other conditions—has been and still is responsible, in large part, for the persistently bad results of treatment. There is no reasonable basis, physiologically or anatomically, for the application of an ointment to the skin in any infective condition when that process is accompanied by the discharge of serum or pus—and especially when follicles and glands are involved. The vital functions of the whole of the skin covered, and sealed, by the ointment are seriously interfered with, more particularly the functions of respiration and secretion. The result is that the affected area passes rapidly into an unhealthy state and is readily irritated by the small proportion of antiseptic in the application. Meanwhile, the infected follicles, having their apertures blocked, now function as ideal bacteriological culture tubes, and the last state is worse than the first.

The prolonged use of fomentations, wet lint dressings, and even dry masks, similarly interfere with the normal functioning of the skin and impede the process of healing.

These simple measures usually succeed in eradicating the infection, and it is rarely necessary to invoke the aid of the more complicated forms of treatment so often practised.

The idea that x-ray epilation is necessary for proper drainage of the follicles is untrue, and the analogy so commonly quoted—the opening of an abscess by the surgeon—has absolutely no basis in fact, either anatomically or pathologically. It is, of course, more easy to treat a case that has been epilated, but x-ray epilation demands great skill and care in the operator to ensure that no damage is done to the skin. If x-ray epilation is resorted to in an obstinate case, it is still most important to resist the desire to apply an ointment subsequently, or the whole purpose of the epilation is undone.

The use of drugs internally, the intramuscular injection of metals, the application of so-called antiviral, and the exhibition of vaccines appear to me to add unnecessarily to the tortures of the damned. Most of these produce some measure of relief, but no measure of cure.

When the infective process in sycosis barbae has been dealt with there sometimes remains a papular erythema about the mouths of the follicles. This condition readily responds to a few small applications of x rays.

PROGNOSIS.

The prognosis in sycosis barbae is, in my opinion, good. Few cases should require treatment for a period of longer than three months, and cases diagnosed early will clear up in the course of a few weeks.

REFERENCES.

¹ Sabouraud, R.: *Annales de Dermatologie et de Syphiligraphie*, tome vii, 1926, pp. 1, 129, 403. ² Sequeira, J. H.: *Diseases of the Skin*, 1927, p. 214.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

TREATMENT OF CHRONIC COCCOGENIC SYCOSIS
(BARBERS' RASH).

THE treatment of this chronic pyogenic folliculitis of the beard, moustache, and scalp regions has always been, I feel, the despair of the unfortunate patient suffering from the disease, and of his doctor, who is unable to do very much for him. The difficulty in the treatment of the condition lies in the fact that this folliculitis is too deep to be affected by ordinary antiseptic treatment, and yet is not deep enough to be modified by vaccines. X-ray treatment, also, is practically useless because the condition is purely a folliculitis, and the hairs in the diseased follicles are not invaded by the cocci. Epilation by means of x rays does not destroy the majority of the infecting organisms, as it does in those diseases due to the higher fungi, such as tinea capitis and certain types of trichophytic affections of the scalp and beard regions, where the hairs are primarily infected, and the folliculitis is only a secondary infection.

After vainly trying all kinds of treatments for nearly ten years in the skin department at the General Hospital, Birmingham, I have gradually evolved the following method of dealing with the condition. It is not a "lightning cure," and there is nothing very unusual about it, but, if it is employed properly, it will render the sufferer presentable in a very short time, and cure him eventually.

The treatment may at first sight appear to be rather complicated, but it is not really so. It should be carried out *only once a day*; and with the average patient should not take longer than ten minutes. None of the steps should be omitted, since they all have their *raison d'être*.

1. Epilate infected follicles and evacuate pustular lesions with a clean needle.

2. Wash the affected parts, using Midgley's 10 per cent. superfatted sulphur soap.

3. Dry the parts, leaving them slightly damp by mopping with a towel.

4. Apply the following iodine solution, with a tampon of cotton-wool, all over the affected parts, fairly hard:

Iodine (without potassium iodide)	...	...	...	4 grains
Spirit (90 per cent.)	...	...	...	1 oz.

5. Allow to dry.

6. Smear the following sulphur lotion, sparingly, all over the affected parts:

Sulph. precipit.	...	...	...	1-2 drachms
Spt. camph.	...	...	...	1 drachm
Lot. calaminae	...	...	ad	8 oz.

7. Allow to dry.

8. Apply very sparingly a small quantity of the following zinc cream all over the affected parts:

Zinci oxidi	...	...	...	15 grains
Neutral yellow vaseline	...	...	...	1 oz.

9. Dust over sparingly with pure talcum powder.

The patient, in my opinion, should not shave more than twice a week. When he does so he should first epilate the infected follicles; then wash with sulphur soap; then shave with a very sharp razor; then wash again with sulphur soap; and then carry on with the treatment as suggested.

The strength of the sulphur lotion used is to be varied with the degree of inflammatory reaction present in the skin, and the tolerance of the patient's skin to sulphur. The zinc cream must be used sparingly; if it is plastered on it will overheat the parts instead of acting as a corrective to the other applications.

It must be remembered that the patient's general health and occupation have an important bearing on the chronicity of the affection. Septic foci should be looked for, especially teeth, and dealt with. Working in ill-ventilated, overheated workshops is bad, since it lowers the vitality of the patient and converts his hair follicles into culture tubes for the *Staphylococcus aureus*. For the well-to-do a holiday in Switzerland, or in a dry place well above the sea level