

RECENT ADVANCES IN DERMATOLOGY*

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Such a mass of work has been carried out in dermatology in recent years that any paper of this type cannot claim to be a survey of all that is important and new in the subject. The writer is well aware that he can only present a summary of certain aspects of the subject and these, necessarily, will be those which interest him personally. The paper will be divided into two parts, new diseases and new treatments.

NEW DISEASES

Follicular Mucinosis

Although this condition was first described by Kreibich in 1926 (1), it has recently been brought to wider attention by Pinkus (2). Clinically there is a raised erythematous, rather dry-looking plaque, sited most frequently on the face, and often at the outer edge of the eyebrows; when the hairy parts are involved there is a consequent loss of hair. The patch is sometimes of a fairly transitory nature, in which case the hair loss is temporary, but more often the lesions become chronic and a permanent alopecia develops. In this chronic type the association of hair loss with a follicular hyperkeratosis should lead the clinician to suspect the diagnosis of follicular mucinosis, which can only be confirmed by biopsy. Haber (3) has pointed out that in the acute type there is oedema and spongiosis of the hair follicles which may, in the chronic form, lead to cystic degeneration of the hair follicles and milia formation. All these lesions show deposits of mucin in the pathological areas and this is in contra-distinction with all other forms of disease in which mucin is found in the skin. In myxoedema (associated with hypothyroidism), pretibial myxoedema (associated with hyperthyroidism), lichen myxoedematosis, and scleromyxoedema, the mucin is always deposited in the dermis; in follicular mucinosis, the mucin is found in the epidermis. Haber suggested that this was simply a form of eczema of the hair follicles but Baer and Witten (4) questioned this asking "in what other form of eczema is mucin deposited?". That this question was probably irrelevant was indicated by the finding of Abulafia and Pierini (5) who pointed out that the initial change was in the external epithelial sheath of the hair follicle,

which normally contains mucin in its lower parts. Authorities differ on the success of treatment in these cases, but it seems that seroid ointments in the acute cases and intra-lesional hydrocortisone in the chronic ones may be successful.

Most recently Kim and Winkelmann (6) have pointed out that a number of these cases, particularly if they are of the more chronic type and show numerous lesions, may be clinically confused with mycosis fungoides, and they even claim that certain cases with typical lesions have progressed to mycosis fungoides. This finding is so recent that no confirmatory cases have been published by other observers.

Lutz-Miescher's Elastoma

In 1953 Lutz described a condition that he called "serpiginous follicular keratosis", and two years later Miescher studied the same condition in greater detail and gave it the name of "elastoma verruciforme intrapapillare perforans". It has now been agreed by most authorities that the eponymous name "Lutz-Miescher elastoma" is generally acceptable.

Usually situated on the nape or the side of the neck there are groups of rather keratotic papules in a serpiginous outline, with, as the disease progresses, a rather depressed and atrophic centre. Histologically (Woringer & Laugier (7)) the condition seems to start with an accumulation of elastin at the tip of a dermal papilla which is then embraced by a downward proliferation of the epidermis and accompanied by a lymphocytic and histiocytic giant cell reaction. The epidermis then seems to surround the pathological area completely and it is extruded through the epidermis in a hyperkeratotic mass, after which the granuloma subsides leaving cicatricial collagen devoid of elastin. It is of course unusual to find all phases of the reaction in a single lesion and the most commonly seen histological picture is that of an acanthotic lesion, surmounted by hyper- or para-keratosis and containing, in the epidermis, an amorphous mass which contains a considerable amount of elastin. Woringer also emphasised that he has seen cases associated with other forms of elastin

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disease (acrogeria, ecchymoses and Ehler's-Danlos syndrome) and it seems probable that the Lutz-Miescher elastoma is simply one of a range of diseases of elastin, the true importance of which is as yet not understood.

Erythrasma

This is hardly a new disease, but the work of Sarkany, Taplin and Blank (8, 9) has radically altered many of our past conceptions of the disease. Working in Florida they continually isolated a gram positive bacillus which they have since (10) recognised as *cornyobacterium minutissimum* (von Bahrensprung) *n. comb.* and not the actinomycete that it was always thought to be. The lesions, usually in the inguinal and axillary regions although sometimes they are generalised, are a reddish brown in colour surmounted with a furfuraceous scaling and they fluoresce a coral-pink colour under the Wood's light. It has also been pointed out that many moist white interdigital lesions of the feet show the same fluorescence and the same organism can be isolated. According to the authors all these lesions are rapidly cured by the oral administration of erythromycin.

The ease with which Sarkany and his colleagues found a large number of cases astonished many dermatologists, and it seems to be certain that many cases have been missed in the past. It is therefore advisable in all cases of "seborrhoeic intertrigo" which do not respond to routine treatments, and in cases of "tinea cruris" or "tinea pedis" in which no fungus can be detected, to examine the patient for coral-pink fluorescence under Wood's light.

Diseases caused by Atypical Mycobacteria

In the past few years several diseases have been recognised as being due to previously undescribed mycobacteria, and simply to find mycobacteria in a granuloma is no longer evidence that the patient has either tuberculosis or leprosy. Marsden, (11) for example, recognised an atypical chromogenic mycobacterium in a number of cases of children who apparently had tuberculous glands of the neck, and in dermatology other entities have been recognised. Starting in Scandinavia, a condition was described as the "swimming-pool" granuloma. This was histologically a typical tuberculoid granuloma occurring, usually, on easily traumatised sites—elbow, knee or ankle—in patients who frequented certain swimming baths. The largest epidemic described to date (Mollohan and Romer (12)) brought to light 262 cases from a

single swimming pool in America. The causative organism has been named *Mycobacterium balnei* and has specific cultural characteristics.

A further atypical mycobacterium, *M. Ulcerans* has been found to be responsible for very unpleasant ulceration of the skin, in Uganda and in Australia. Clancey *et al* (13) describe very large ulcers with undermined edges which easily become secondarily infected. The lesions, which are full of acid-alcohol fast organisms, start as dermal nodules which break down and spread quite rapidly, apparently not reacting at all well to anti-tuberculous drugs, although there is a tentative suggestion that they might react slightly to sulphones. Several of the cases reported have needed widespread excision and grafting.

NEW TREATMENTS

GRISEOFULVIN

There has been a mass of studies on this wonderful drug and opinions have been reached about its place in the general therapeutic armamentarium.

Tinea Capitis. There is universal agreement that in all forms of tinea capitis from *M. canis* to *T. Schoenleinii* Griseofulvin is the drug of choice, it is more rapid than any form of local treatment, and safer than X-ray epilation. Fine particle Griseofulvin (containing 125 mgms. of griseofulvin with a particle size of 1.0 SSA) has been shown on double blind clinical trial (Pettit, (14)) to have just as good an effect as the older tablets with 250 mgms. of material with a particle size of 0.4 SSA. This finding has been substantiated by other workers for all types of disease in which griseofulvin has a value.

Tinea Corporis. Griseofulvin cures all ring-work conditions of the glabrous skin but there seems to be little point in using an oral treatment to cure a small patch of fungus disease on the skin and most workers agree that there is still a considerable place in this type of disease for the more classical treatments (Whitfield's ointment, Castellani's paint, etc.). The newer treatment however is very much better than anything previously available for infection by *Trichophyton rubrum*.

Tinea Pedis. Nearly every worker who has analysed his results agrees with Williams (15) that Griseofulvin has no value for interdigital fungous infections of the feet, and this also applies to infections with *Tinea versicolor* and with *Candida Albicans*.

Tinea Unguium. After initial enthusiasm the treatment of ringworm of the nails by griseofulvin alone has been accepted as disappointing. Most workers agree that although the initial improvement is very good, after about four months treatment many of the patients start to relapse. It is suggested that the most effective treatment of such cases is a combination of drug therapy with avulsion of the nail after about two weeks oral treatment and with another four weeks tablets after the operation.

Dermabrasion

A few years ago the early enthusiasm for dermabrasive techniques began to wane, and the method has recently been used less and less. This form of reaction is often seen in medicine, but ultimately the new treatment finds its own level. Bett (16) of St. John's Hospital in London has recently summarised the present views on the use of dermabrasion. He recommends that "Freon" (di-chlorotetra-fluor-ethane) should be used as the freezing agent and believes that the best results are obtained by a steel burr when used at 18,000 revolutions per minute.

It must however be remembered dermabrasion is not a magic technique and cannot remove any scar. Patients should always be told beforehand that scars will be larger after dermabrasion, but less noticeable because the removal of any precipitous edge will abolish the eye-catching shadow which makes the scar visible at a distance. Pitted scars (acne, small pox, etc.) tattoos and hyperkeratotic naevi seem to be the conditions in which dermabrasion has the best chance of success.

Intra-lesional Hydrocortisone

This treatment is so very fashionable at the moment that one gets the impression that in certain countries there is no chronic patch of skin trouble which has not been subjected recently to intra lesional injection. References to the use of this are so numerous, particularly in reports of clinical meetings, that no purpose would be served by giving them here. It is sufficient to say that the intradermal injection of small quantities of hydrocortisone seems to have definite value in hypertrophic lichen planus and lupus erythematosus and many workers believe that it is also of value in the treatment of keloids, although here the injection is often extremely difficult and very painful to the patient. In the latter cases the writer has found it best to use a very solid syringe which has a special grip for the doctor's fingers, and preferably one in which the needle can be screwed on.

Recent Treatments for Acne Vulgaris

For several years there has been a controversy concerning the use of anti-biotics in the control of the pustular aspect of Acne vulgaris. Cronk et al (17) in 1956 was emphatic that long-term administration of tetracyclines was of value and this has been confirmed by Cornbleet (18). There is some divergence of opinion as to the optimal dose, but the writer has had numerous good effects from the use of the following dosage scheme:—

"Terramycin" 250 mgms. daily for three weeks each month until the relapse at the end of the rest period no longer occurs; it is then possible to reduce the dosage to a daily tablet for a fortnight in every month, and so progressively to stop the treatment.

Although this method of therapy is completely at variance with the accepted theories of antibiotic activity, patients can be treated in this way for several years without developing sensitivity to the drug or bacterial resistance. Patients are extremely grateful for this treatment as it diminishes the cosmetic unpleasantness of the disease during its active phase and also reduces the amount of scarring that the pustules so frequently leave as a memento of their visit.

More recently studies have been performed on the value of long-acting sulphonamides as similar controls of pustulation. Brandt and Beyer (19) have treated over 100 cases with one tablet of "Madribon" per day and claim a very satisfactory result. It is probable that most similar sulphonamides have a value and a comparative trial between these and the tetracycline drugs would be of great value.

In the past few years many claims have been made as to the value of serum gonadotrophin in acne. Pettit (20) published a double blind controlled trial in which he was unable to detect any value in this drug, and no papers have since been written expressing a contrary opinion. Most dermatologists in England do not include this drug in their personal pharmacopoeia.

SUMMARY

Attention is drawn to a number of recently described skin conditions and a number of new treatments which, in the opinion of the writer, warrant more extensive publicity.

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