DEKMATOLOGY.

UNDER THE CHARGE OF

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SKIN ERUPTION ASSOCIATED WITH GREAT NUMBERS OF DEMODEX FOLLICULARUM.

It has long been known that the acarus, demodex folliculorum, is not infrequently found in the sebaceous glands, especially in cases of acne. Lawrence (Med. Journ. of Australia, 30th December 1916) disputes the view that the demodex is in all cases harmless, and describes a special eruption which he attributes to its presence. The eruption occurs on the face in adults, and is impetiginous in character and associated with large numbers of the demodex. The lesions have a tendency to form rings, and the border of the skin is more definitely raised than in impetigo contagiosa. The pustulation is not so severe and the condition does not respond so readily to treatment as does impetigo. Simple scraping from the skin will reveal several of the parasites in each field of the microscope. It would be difficult to prove definitely that this parasite is or is not an accidental infection, but in support of its pathogenicity is the fact that in dogs a somewhat similar condition is well known, viz. follicular mange. This disease in dogs consists of a pustular and squamous eruption leading to great irritation, and the demodex is found in overwhelming numbers, and is generally accepted as the cause of the condition. There is also the fact that Gruby produced this condition in dogs by inoculating their skins with the demodex from human beings.

For these demodex lesions in human beings, Lawrence recommends painting with tincture of iodine after rubbing the parts with a salicylic and boracic ether lotion.

CINNAMON AS A PROPHYLACTIC.

Drummond suggests (Brit. Med. Journ., 9th June 1917) that cinnamon deserves a trial as a prophylactic in measles and German measles. A nurse in an institution, having taken German measles, was in close attendance on twenty young children on two days (evening and morning) after the symptoms appeared. The children received a dose of powdered cinnamon twice daily for three weeks. None developed the disease.

W. B. D.
Ultraviolet Rays in Skin Diseases.

In the minds of most medical men the ultraviolet rays are associated with Finsen's method of treating lupus. That they are very useful in the treatment of many other conditions is not so well known. In the recent improvements in producing these rays so that a more intense radiation than formerly can be obtained, the long exposure, which was necessary in Finsen's time, can be reduced to a few minutes and the same result produced. Wise (New York Med. Journ., 3rd February 1917) shows that, properly used, the rays may be used in many dermatological conditions where the usual remedies have failed. He does not claim that they are superior to X-rays and radium, but the risk of doing permanent injury to the skin is very much less. The type of skin disease in which they are most useful is the chronic inflammatory dermatoses. To get a satisfactory result an application sufficient to produce a good reaction is necessary. In Wise's experience anything short of that produces very little effect. Good results were obtained in angioma serpiginosum, acne, acne varioliformis, chloasma, rosacea, and seborrhea. The chronic patches of lichen chronicus simplex, so often found on the neck and about the knees and elbows, were greatly benefited, as also were cases of chronic sealy eczema. Chronic leg ulcers can be stimulated by the rays and healing promoted. Chronic psoriasis patches also frequently improve, but this treatment is only to be recommended where other methods are not practicable or have been unsuccessful. In alopecia areata the rays may also be used to produce an erythema of the scalp and promote the growth of the hair. Wise has also used the method for treating seborrhea of the scalp, and has succeeded in stopping the falling out of the hair which so often occurs in that condition.

Nitrogen Metabolism in Two Cases of Eczema.

In former abstracts in this Journal the work of Schamberg and Raiziss on metabolism in psoriasis was reported. The same investigators (Journ. of Cut. Dis., March 1917) have continued their researches in cases of eczema. In psoriasis it was demonstrated that there is a tendency to store up nitrogen in the body, and a low nitrogen diet had a favourable influence on the course of the eruption. The two cases of eczema examined differed both clinically and in the results obtained. The one which the authors considered a chronic eczematoid dermatitis of external origin failed to maintain a nitrogen equilibrium on a low nitrogenous diet and did not show a true retention of nitrogen. This case also failed to show any improvement on a low protein diet. The other, which was diagnosed as eczema of systemic origin, showed a true retention of nitrogen and exhibited marked improvement on
a low protein diet. The elimination of creatinin in both cases was normal, and both patients showed an increase on the elimination of uric acid. The uric acid content of the blood, however, was normal. The authors do not interpret the increased uric acid output as an indication of gout, but think that it bears some relation to the leucocytic deposits in the skin, from which there was probably some absorption. From an examination of such cases, both of which are usually classed as "eczema," it is evident that under that name two entirely different conditions were under examination. It also explains why in cases of "eczema," which are very similar clinically, dieting gives good results in some and has absolutely no effect in others.

**TETRYL DERMATITIS.**

The recent increase all over the country in the number of workers in explosives has led to a corresponding increase in cases of dermatitis, etc., due to these substances. Of these, one of the commonest is tetryl. In the January-March number of the *British Journal of Dermatology* Dr. Lucy Cripps and Dr. William L. Buxton contribute useful articles on the subject. The symptoms produced by workers in tetryl are fairly uniform, and consist of a yellow discoloration and an irritation of the skin which is exposed to tetryl dust, irritation of the nasal and pharyngeal mucous membranes, and, to some extent, of the stomach. Of these symptoms dermatitis is much the commonest; Buxton states that if no precautions were taken, 32 per cent. of the workers were affected. The distribution is more or less limited to the areas not protected by clothes during work, *i.e.* the hands, forearms, face, neck, and upper part of chest, but if the clothes were loose about the neck and chest, the body also might be affected. Tetryl is met with in four different forms—(1) ground powder; (2) very fine crystals; (3) larger crystals; and (4) granular masses. The kinds of tetryl which affect the workers most are the fine powdery form and the large moist crystals. Probably the reason for the fine powder being so irritating is that a greater amount of it gets into the air and so on to the exposed parts. The severity of the rashes produced varies with the amount and alkalinity of the sweat. Those with dry skins are less easily affected than those who perspire freely. The yellow discoloration of the skin is not permanent. Exposure to light has some effect in darkening the colour, but is not the only factor, and persons so discoloured regain their normal colour absolutely if completely removed from tetryl. Dermatitis occurs in two varieties—(1) as a rose-red inflammation affecting the skin uniformly; and (2) as a papular rash, apt to discharge sero-pus if allowed to remain untreated. Both varieties are, as a rule, preceded by itching, which in some cases is very severe. The hair generally becomes discoloured, and the loss of hair, which is often
considerable, varies directly in proportion to the sweating of the scalp.Nearly all workers suffer from sneezing, and epistaxis is not uncommon.Pharyngeal irritation is also sometimes complained of.

There are two types of respiratory symptoms—asthmatic and asphyxial—both due to irritation of the bronchi. Headache and giddiness are also sometimes produced. Gastric symptoms may also occur, but it is doubtful in many cases whether the tetryl was directly responsible. The blood shows no marked changes, but in the majority of cases there is a degree of leucocytosis. There is also a relative increase in the percentage of large lymphocytes.

The treatment is the same as for all forms of local dermatitis. The inflamed surfaces should be washed clean and in the simple cases a calamine lotion applied. A simple ointment, like ung. zinc. oleat., is also useful. If infected, the usual treatment for septic lesions should be applied.

In order to prevent dermatitis as far as possible rather elaborate precautions have to be taken. The workrooms have to be well ventilated and all loose powder on tables, etc., washed off. The worker should wear overalls which fit closely at the neck and wrists. The skin of exposed parts should be well powderd with some simple dusting powder so as to keep the skin as dry as possible. Veils to protect the face were found to obstruct the vision and were not any more efficient than powdering the skin. The hands are protected by soft wash leather gloves which fit well and reach up to the elbows. All exposed surfaces should be washed after work in hot water to which a solvent (2 per cent. ammonia) has been added. Natural immunity to tetryl does not seem to exist, and the period between "inoculation" and the onset of symptoms varies with the virulence of the powder and the precautions taken. Recurrence of the rash often occurs, so that immunity does not seem to be acquired. The most successful results were obtained where the workers were closely supervised and as soon as any symptoms appeared treatment applied. The cases where these precautions were neglected always took a very much longer time to recover.

The Relation of Lupus Pernio to the Sarcoids.

Lupus pernio is a chronic disease in which bluish-red lumpy lesions appear on the nose and cheeks, not infrequently also associated with swellings of the fingers and toes. The lesions on the hands and feet may be bluish-red in colour, and resemble chilblains very closely. These purple lesions also show yellowish nodules resembling tubercle nodules. The disease progresses very slowly and is benign in character, and looks, especially on the face, like a swollen lupus. Microscopically the lesions are a granuloma, with a structure very like that of tubercle.
Schaumann (Annales de dermat. et syph., January 1917) gives an account of four cases, and comes to the conclusion that the condition has no relation to tuberculosis whatever, and that it is identical with the condition described as sarcoid. He found that before the skin lesions appeared there was a general enlargement of all lymphatic glands and tonsils. There is also an increase of lymphoid tissue in the bone-marrow, lungs, spleen, and liver. Many cases in addition to the nodular lupus pernio lesions show on the body or limbs areas of scaly itchy dermatitis. Schaumann's cases failed to give any reaction to tuberculin, and glands excised and inoculated into guinea-pigs failed to produce tuberculosis. The glands also do not break down and caseate as tuberculous glands do. The symptoms come and go, but tend to be worse in winter than summer. There is an increase in the large mononucleated cells of the blood, and this is influenced by the administration of arsenic. Schaumann would classify the condition among the lymphatic diseases, such as Hodgkins' disease, and considers that it has no relation whatever to tuberculosis or to any other known infection. He places it among the infectious granulomata, and suggests the name of benign lympho-granuloma as the most suitable one.

R. C. L.