1938). In a later report, one of us (Cheeseman, 1950) reported no cases in five girls' schools examined and attack rates varying from 2.61 to 10.39 per cent. per term in 11 boys' schools.

Age Incidence.—The ages of the patients in the present series ranged from 11 to 60 years. According to the Medical Research Council (1938) most authorities agree that tinea cruris is seldom seen before puberty, but little information is available about relative risks at varying ages of adult life.

Mode of Spread.—It is assumed that infection may be spread via underclothing, athletic straps, sportswear, etc., but in practice this theory is seldom substantiated. It may be that infection may be spread via the fingers, since the groin area is a most favourable site for fungus infection due to the frequency of excessive perspiration, and the fingers themselves are not infected. Other infections undoubtedly result from simple spread of infection from toes, nails, etc., to the groin.

Treatment.—Again, there are many efficient fungicides, any one of which suffices, and the important points regarding prevention of reinfection from clothing, elimination of other affected areas, such as toes and nails, are all important.

Prevention.—Personal hygiene would appear to be the most important single factor in the prevention of tinea cruris, and the general preventive measures applicable to tinea pedis apply. It is of interest to note that the attack rates in boarding schools where patients were isolated were generally much less than those in schools where isolation was not practised (Medical Research Council, 1938; Cheeseman, 1950).

Differential Diagnosis of Tinea Cruris.—The important differential diagnosis is seborrhœic intertrigo. This condition is always bilateral and is usually quite symmetrical. In addition, it frequently spreads on to the perianal region. There is little margination, and other manifestations of seborrhœic dermatitis may be found elsewhere.

TINEA UNGUIUM.

General.

T. mentagrophytes and *T. rubrum* are the organisms responsible for the majority of cases of ringworm of the nails. The condition is not particularly common in the North of Ireland (13 cases were seen, two associated with tinea pedis and one with tinea corporis), but few maladies are more difficult to eradicate than fungus infections of the nails.

Clinical Appearances.—Infected nails are opaque, friable, lustreless, yellow, and thickened. One or all nails (of hands and feet) may be infected. There is usually no pain or tenderness, but, of course, the abnormal nail is liable to frequent minor traumata. Most patients complain bitterly of the appearance of the affected nails.

The infection usually begins under the free border or along the sides of the nail plate. The nail gradually separates and debris accumulates. The nail plate itself gets thinner, more brittle, and breaks off.

Treatment.—It is usually necessary to remove the nail plate either surgically or with repeated sandpapering. Efficient fungicides, preferably the aniline dyes, since they probably stay on the affected areas better, are applied at regular intervals. The frequency of relapse is a source of constant disappointment both to the patient and to doctor.

Prevention.—Spread of infection is directly or indirectly from case to case. The frequency of concomitant tinea pedis, cruris, corporis, etc., is important. We feel that only too often this is overlooked and that patients who have had nail infections for very long times will often have forgotten tinea of other parts from which the nails were infected (e.g., by scratching), and that, vice versa, chronic nail infections are a constant source of reinfection for tinea of other parts (e.g., tinea of toe nails reinfecting the feet).

Differential Diagnosis of Tinea Unguium.

It is difficult to differentiate the fungi from the clinical appearances of the abnormal nails, but Lewis & Hopper (1948) give the following pointers :—

(1) Tinea unguium, due to *T. rubrum*, is often associated with concomitant tinea pedis, due to the same organism.

(2) A superficial location of the infection on the nail is frequent with *T. mentagrophytes*, but practically unknown with *T. rubrum*.

(3) The duration of the infection is shorter and the progress faster with *T. mentagrophytes*.

The most confusing differential diagnosis is psoriasis, but this is seldom found in the nails alone, also it is usually bilateral and often symmetrical. Chronic paronychia (a monilial infection), which affects primarily the nail folds and produces only secondary changes in the nail plates, is more readily differentiated.

Summary.

1. The North of Ireland, in common with many other communities, has recently suffered from severe outbreaks of tinea capitis.

2. A survey of the problem was undertaken at the Royal Belfast Hospital for Sick Children, where a Ringworm Clinic was established.

3. In addition, an analysis of the whole problem of ringworm infection in the North of Ireland was carried out, using data from all those hospitals where skin clinics are held.

4. The various organisms found, the clinical manifestations produced by these organisms, and the treatments required are briefly outlined.

5. The distribution of the various types of tinea capitis within the Province is given in detail.

6. Some steps which may help to prevent further outbreaks in the North of Ireland are suggested.

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