MEDICINE TODAY

Psoriatic Arthropathy

"Medicine Today" is the television series for doctors produced by the B.B.C. Advice on the preparation of the programme is given by the Association for the Study of Medical Education.

The programme on B.B.C.2 on 26 March was on the subject of psoriasis. Printed below is an article prepared with the help of expert contributors to complement the television programme which will be repeated on B.B.C.1 on 3 April at about 11 p.m.

In 1927 Philip Hench[1] suggested that psoriatic arthropathy was a complication of long-standing psoriasis. Since then, in spite of numerous conflicting studies and opinions, the view is still generally held that this form of arthritis should be considered apart and distinct from classical rheumatoid arthritis. Points of distinction are that in psoriatic arthropathy firstly the sheep cell agglutination test (S.C.A.T.) is usually negative; secondly, subcutaneous rheumatoid nodules are absent; thirdly, the terminal interphalangeal joints are often affected, particularly when finger-nails are affected by psoriasis (Fig. 1); and finally a syndrome resembling ankylosing spondylitis with changes in sacroiliac joints as well as peripheral joints occurs more often than in classical rheumatoid arthritis.

Many other clinical features in which the two forms of arthritis differ have been noted. The disorder is sometimes milder and fewer joints are affected than in the average case of rheumatoid arthritis, but on the other hand it is more destructive and erosive. Psoriatic arthritis is relatively more common in males; it is more asymmetrical than is rheumatoid arthritis, and so on. These clinical points of distinction fall down in some series, and are maintained in others. In the television programme attention was drawn to what French authors used to call the "sausage finger" (Fig. 2) in psoriatic arthropathy. All the joints in the finger are very swollen—proximal and terminal interphalangeal joints as well as metacarpo-phalangeal—a picture very different from that of the rheumatoid spindle. The periosteal changes in the phalanges produce a picture more of a mixed arthritis and dactylitis than of an arthritis alone (Fig. 3). Though psoriatic arthropathy is now generally held to be a different entity from rheumatoid arthritis, typical rheumatoid arthritis may sometimes coexist with psoriasis. In these cases the Waaler–Rose test is positive, nodules occur, and the arthritis assumes its classical form, though with coexistent psoriasis. Both conditions, psoriasis and rheumatoid arthritis, are so common that it is not surprising that they may occasionally meet in the same patient. In a survey of 144 patients with psoriasis and erosive arthritis reported by Wright[2,3] there were 23 with a positive sheep cell agglutination titre (S.C.A.T.). These patients clinically and radiologically differed in no way from classical rheumatoid arthritis, and 17% of them had rheumatoid subcutaneous nodules. Lassus and his colleagues[4] investigated 104 patients with psoriasis with arthritis. The Waaler–Rose test was positive in 12.2% and the latex test in 16.8%. In patients with rheumatoid arthritis without psoriasis the tests were positive in 69.3% and 85.7% of cases respectively, while in 80 cases of uncomplicated psoriasis no positive results were found. Where terminal finger-joints are affected by arthritic change, it is common experience that the Waaler–Rose test is almost invariably negative.

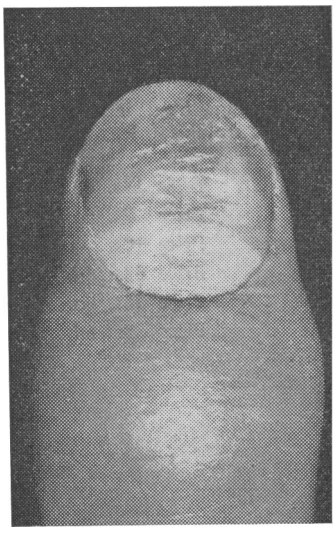

FIG. 1

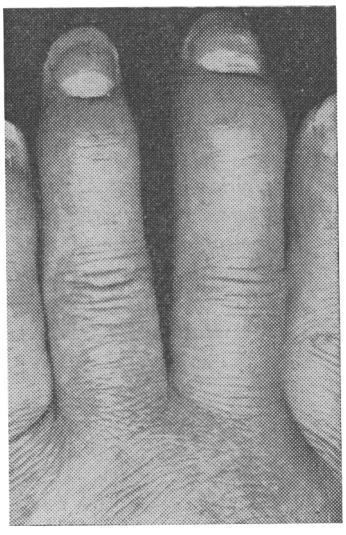

FIG. 2

FIG. 1.—Psoriasis affecting finger-nail. FIG. 2.—Sausage finger in psoriatic arthritis.

Sacroiliac Joints

In 1961 Dixon and Lience[5] reported a greater incidence of sacroiliac changes in 33 patients with psoriasis and chronic arthritis than in 56 patients with S.C.A.T.-positive rheumatoid arthritis. Similar findings have been reported by Wright[6] and Hill.[7] More recently Jajić[8] in Yugoslavia compared the radiological changes in spine and sacroiliac joints in psoriatic patients with and without arthritis; spondylitic changes were present in the radiographs of the majority of patients with peripheral arthritis, but in only a minority of those with uncomplicated psoriasis. Occasionally a clinical and radiological picture like that of severe ankylosing spondylitis—with spine stiff from occiput to sacrum and with neck, hips, and shoulders affected—is seen in psoriatic arthropathy, with peripheral joint involvement in addition, but this is not common.

There seems to be little relationship in time between the onset of psoriasis and of arthritis, the former usually occurring years before the latter. They do not usually wax and wane together, nor do severity of the arthritis and that of the skin condition run parallel. If the finger-nails become affected by psoriasis it is not uncommon for this to be followed within a few weeks or months by arthritis in the terminal finger-joints. Interphalangeal joints of toes may similarly be affected. In patients who develop arthritis mutilans in the terminal joints of the fingers there is a high incidence of psoriatic changes in adjacent nails, which may show pitting, thickening, ridging, discoloration, and detachment.

Family studies have indicated[9,10] that the incidence of psoriasis in relatives of patients with psoriatic arthropathy is significantly increased, a family study of patients with sero-negative inflammatory

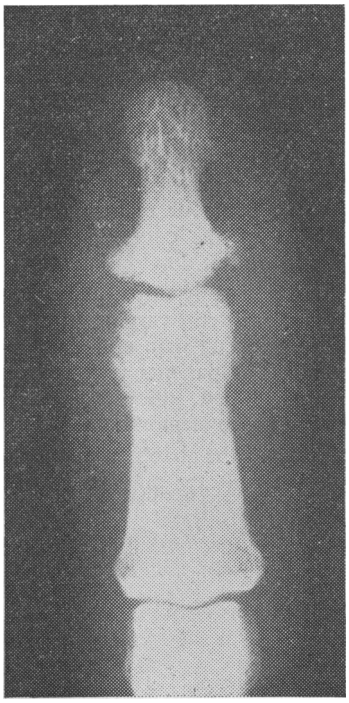

FIG. 3.—Terminal phalanx in psoriatic arthropathy.

arthritis showing a markedly increased incidence of psoriasis in first-degree relatives as compared with those of patients with sero-positive rheumatoid arthritis. Attention has been drawn to points of clinical similarity between psoriatic arthropathy and Reiter's (Brodie's) disease.[10]

Treatment

Most forms of treatment used in rheumatoid arthritis have been tried in psoriatic arthropathy with variable results. Apart from treatment of the coexistent skin condition, very ably dealt with in the television programme, treatment of the arthropathy calls for no particular or specific measures. Antimalarials may exacerbate the skin condition, and antimetabolites such as methotrexate may cause severe complications, which in the opinion of many clinicians more than outweigh any clinical advantages—it is only in severe cases doing badly on orthodox therapy that agents such as these would be tried. Management, therefore, is much as in other forms of inflammatory arthritis, with a programme of rest, physiotherapy, and exercises, analgesics, anti-inflammatory drugs, and sometimes small doses of corticosteroids. A small dose such as 5 mg. prednisolone taken at night may help alleviate morning stiffness, as may an indomethacin suppository 100 mg. on retiring. Agents likely to cause skin reactions, such as gold salts and the antimalarials (chloroquine) are best in general avoided, though opinions are far from uniform in this respect. As the editors of the 17th Rheumatism Review[11] point out, although the frequency of precipitation of acute exfoliative psoriasis is probably not great with the antimalarials, the risk of producing an exfoliative dermatitis, even if small, outweighs the equivocal effect of benefit.

Prognosis

Finally, prognosis. In the combined experience of Reed and Wright[10] in the U.S.A. and Britain there were 32 deaths. They estimate that corticosteroid therapy may have been a contributory factor in 15 of the 32—that is, in almost half the total series. It was said of corticosteroid therapy some years ago that it should be started in a case of chronic progressive rheumatoid arthritis only after as full a consultation with all interested parties as for a major operation on a sick patient. This is perhaps even more true of the use of antimetabolites in psoriatic arthropathy—their use for a condition very seldom lethal if treated conservatively must be contemplated with extreme caution.

REFERENCES

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ANY QUESTIONS?

We publish below a selection of questions and answers of general interest.

Taste for Phenol

Q.—*Is there a genetic trait which enables its possessors to taste a minute quantity of phenol in water?*

A.—The ability to taste a minute quantity of phenol in water has not, so far as I know, been shown to be genetically determined.

Survival of Mosquito's Eggs

Q.—*Is there a type of mosquito which lays its eggs in sand and which hatch when the temperature and humidity are suitable, taking months or perhaps years? If so, what is the name of this mosquito, its breeding habits, and most suitable antilarval measures?*

A.—I do not know of any mosquito that specifically lays its eggs in sand. There are, however, many species of the genera *Aëdes* and *Haemagogus* which lay eggs on the dry margins of rock pools, rot holes in trees, or earth depressions (in different cases). The eggs remain dormant in these places until submerged later—in, for example, a subsequent rainy season.[1]

There have been laboratory investigations on the best-known mosquito of this type, *Aëdes aegypti*. From these it has been shown that, provided that a preliminary stage of embryonic development is reached before desiccation, the eggs may survive for months. About 5% may hatch on submersion a year after ovipositum. The larvae from such mosquitoes are quite normal and can be attacked by the usual larvicides.

REFERENCE

1 Bates, M., *The Natural History of Mosquitoes*, 1949. New York.

Idoxuridine and Herpes Zoster

Q.—*Is idoxuridine or any other drug used systemically of any value in herpes zoster of the eye or of any other site?*

A.—It is not known whether this drug has been given by the systemic route for the treatment of zoster, either of the eye or of any other site. So far as I know it has been given only by the intravenous route for the treatment of herpes simplex infection of the central nervous system.

Inheritance of Retinitis Pigmentosa

Q.—*How is retinitis pigmentosa inherited, and what are the chances of the children of a man with the disease inheriting it? There is no family history of the disease on his or on his wife's side.*

A.—Though it is probable that retinitis pigmentosa is always a hereditary condition, no family history can be obtained in approximately 40% of cases. In known pedigrees it may be recessive, dominant, or sex-linked. The recessive form is the most common, and the case described is probably of this type. Children of the marriage are unlikely to be affected unless the parents are blood relatives, but they will carry the recessive gene and must avoid intermarriage within the same pedigree or into a family carrying the trait.

Hypocalcaemia from Ileo-transverse Colostomy

Q.—*Can a hypocalcaemia resulting from ileo-transverse colostomy (performed for adhesions in the caecal fossa) be corrected by diet or medical treatment, and, if so, what treatment, or should the colostomy be undone? It is assumed that the megaloblastic anaemia is controlled by vitamin B_{12}.*

A.—Hypocalcaemia resulting from an ileo-transverse colostomy is extremely rare and probably implies a considerable degree of ileal disease (such as Crohn's) or an anastomosis placed high up the small intestine.

When the ileum is resected, bypassed, or grossly diseased steatorrhoea and malabsorption are often controllable by a low-fat diet (30–35 gm. daily). Supplements may be required, and 50,000 i.u. of vitamin D can be given daily by mouth or 200,000 to 400,000 i.u. intramuscularly once a month. If milk is restricted owing to a low-fat diet calcium can be added.

If there is good reason to believe that the ileo-caecal region is not diseased, then revision of the operation should be seriously considered.