cutanea tarda symptomatica. It has been most frequently reported with the last, whence the great predominance of males. Clinical or biochemical evidence of porphyria has usually followed the diagnosis of the diabetes by several years, but has occasionally preceded it (Berman and Bielický, 1956). There would seem to be no evidence that the conditions are genetically linked. The nature of their biochemical relationship is still a matter for speculation.

The drugs most commonly implicated in the provocation of porphyria are alcohol, barbiturates, and sulphonamides. Circumstantial evidence, in particular the decrease in the ultra-violet fluorescence of the urine only after the tolbutamide was stopped, suggests that this drug may have been responsible in our patient, though it would be unreasonable to place the responsibility on the tolbutamide alone in a patient regularly consuming alcohol and barbiturates.

Summary

A case is reported of porphyria in association with diabetes mellitus.

The possibility that the clinical manifestation of porphyria cutanea tarda was induced by tolbutamide is considered.

The association between porphyria and diabetes is discussed.

We are indebted to the late Dr. N. Lawrie for the biochemical investigations.

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Medical Memoranda

Onchocerciasis Presenting without Dermatitis

It is well known that a patient from tropical Africa complaining of an irritating skin rash requires investigation for onchocerciasis, but it is not generally known that the presenting symptom may be a swollen limb in the absence of skin rash or irritation. The swelling is diffuse and firm, like a Calabar swelling, and may involve the limb completely or in part. Dubois and Forro (1939) observed non-pitting oedema of the lower leg in association with other signs of onchocerciasis, and Chartres (1955) described swelling of the upper limb as part of a reaction to the treatment of onchocerciasis with diethylcarbamazine, but the following case histories indicate that swelling of a limb may be the first clinical manifestation of infection with *Onchocerca volvulus*.

CASE REPORTS

Case 1.—An Englishman aged 37, who had spent 15 years in Uganda, returned to Britain on leave in April, 1953. The following month he developed pain in the right shoulder and a diffuse swelling of his right hand and forearm. The pain and swelling persisted. Two months later the swelling increased, and he observed that the right shoulder was also swollen. There was no skin rash or irritation. One month later (August, 1953) the swelling began to subside and had disappeared by the time he reported at the Hospital for Tropical Diseases at the end of August. No clinical abnormalities were detected, and routine tests for filariasis were as follows: Day and night blood, no microfilariae found; white-cell count, 15,300/c.mm. (eosinophils 60%); filarial skin test, positive; filarial complement-fixation test (C.F.T.), strongly positive; skin shavings, scanty embryos of *O. volvulus* found.

Case 2.—An Englishwoman aged 31, who had spent six years in Uganda, finally left Africa in March, 1956. Six months later she noticed aching pain in her right shoulder, and two months later the shoulder became swollen. Swelling and pain persisted, the pain being aggravated by lying on the right side, by exercise, and by carrying anything heavy in the right hand. After exercise such as tennis the swelling of the right shoulder increased temporarily and involved the upper arm. Dermatitis and pruritus were absent. She was seen at the Hospital for Tropical Diseases in April, 1959, two and a half years after the onset of her symptoms, and was found to have a diffuse swelling of her shoulder, which was firm, non-pitting, and of normal skin colour, resembling a Calabar swelling. The skin appeared normal. Investigations: day and night blood, no microfilariae found; white-cell count, 7,600/c.mm. (eosinophils 18%); filarial C.F.T., weakly positive; numerous embryos of *O. volvulus* found in skin shavings from the right shoulder but absent from other sites; on x-ray examination of right shoulder, the joint appeared normal.

COMMENT

In both patients the swelling was localized to the right upper limb, lasting for three months and two and a half years respectively, and the diagnosis of onchocerciasis was confirmed by demonstrating embryos of *O. volvulus* in skin shavings. Loiasis cannot be excluded on the grounds of absence of microfilariae of *Loa loa* in the day blood, but this finding, taken in conjunction with the fact that both patients had lived in Uganda, one of the regions of tropical Africa in which loiasis is not endemic, almost certainly excludes loiasis. In addition, a Calabar swelling usually disappears in a few days, but even when it remains for a longer period it is very unlikely to persist for three months or more. Bancroftian filariasis can be excluded by the absence of microfilariae of *Wuchereria bancrofti* in the night blood, and by the fact that the oedema cleared up spontaneously in one patient and involved the proximal, not the distal, part of the limb in the other patient; furthermore, there was no history of lymphangitis and no enlarged lymph nodes were palpated.

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W. H. JOPLING, M.R.C.P., M.R.C.P.Ed.,
D.T.M.&H.

S.H.M.O., Hospital for Tropical Diseases, London.

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