SOME CASES OF GOUT

By DAVID LEVI, M.S., F.R.C.S.

Under the highly artificial conditions in which we work, gout is considered to be within the province of the physician. It is therefore with some diffidence that I, as a general surgeon, write about it. During the last twenty-five years, however, I have discovered a number of patients suffering from gout and have been able to direct them to expert medical care. Many surgeons have banished all thought of gout from their minds and this is my plea, that in the investigation of a patient suffering from pain which does not fall within a recognized orthopaedic classification, gout should be considered before the patient is sent away without a diagnosis being made or given a prolonged course of useless symptomatic treatment.

No one would miss the diagnosis in the patient suffering from chronic gout chosen to illustrate this brief communication (Fig. 1). The plasma uric acid was 8 mg. per 100 ml. (normal 2 to 4 mg.). The radiographs show the typical punched-out erosions of bone. Gout seldom presents itself in such a gross form; it may be hidden or latent and *may affect almost any joint in the body*. For example, a medical colleague, a Fellow of the Royal College of Physicians, suffered an obscure but very painful arthritis of the hip joint and wore a caliper for several months. He writes as follows:

'You ask for my experience of gout involving the hip. It must be fairly rare because orthopaedic surgeons have never diagnosed it. Deposits in the lower lumbar region may also explain the attacks of lumbago and sciatica which occur in gouty subjects. Failure to recognize the aetiology may be serious because immobilization in bed may make the gout worse, whereas continuance of activity and a sufficiency of salicylate will usually relieve all the symptoms until the next attack comes. My history is briefly this:

'My family history revealed nothing relevant. About the age of 42 bilateral inflammation of the first metatarso-phalangeal joints developed, worse on the right side. The diagnosis was "arthritis of unknown origin." The treatment was firstly a metatarsal bar which failed to give relief, than a walking plaster. The arthritis gradually subsided.

'About the age of 46 a persistent eczema without obvious cause appeared; it was not diagnosed but was probably gouty in origin. X-ray treatment failed but the condition subsided after some weeks. About the age of 47 arthritis developed in the right hip with symptoms slight at first, but becoming acute *after immobilization in bed*.

'Radiographs showed marked changes and loss of joint space. Gout was not diagnosed even though the blood uric acid was raised to 6.7 mg.! The condition was though to be infective arthritis. After five weeks of immobilization pain developed in the right knee and then suddenly an effusion. The whole episode resulted in *seven months of total incapacity*, during which time treatment was carried out first by extension and then with a long plaster spica. This was followed by *four months of partial incapacity* in a short plaster spica. During this time there was one mild attack of bilateral arthritis of the first metacarpo-phalangeal joints. Gout with various subsequent minor episodes has been treated along accepted modern lines without incapacity.'

In the case of another medical colleague, a consulting neurologist, the diagnosis was not so difficult. He writes as follows:

'I can think of few ailments better suited to the purpose of sharpening a doctor's sympathies by personal suffering than an attack of gout. Its connection with alcohol is often debated, but in my case an attack has now been preceded on two occasions by the luxury of a bottle of sparkling wine. The first time I had noticed paraesthesiae over the distribution of the lateral cutaneous nerve of the left thigh for two weeks. The tingling waxed and waned and I wondered about apical sepsis or perhaps whether I had bruised the nerve in its fascial tunnel below the anterior superior iliac spine without noticing it at the time. After entertaining some friends on Asti Spumanti, however, the paraesthesiae gave way at 3 a.m. to a severe ache in the same region, and a branch of

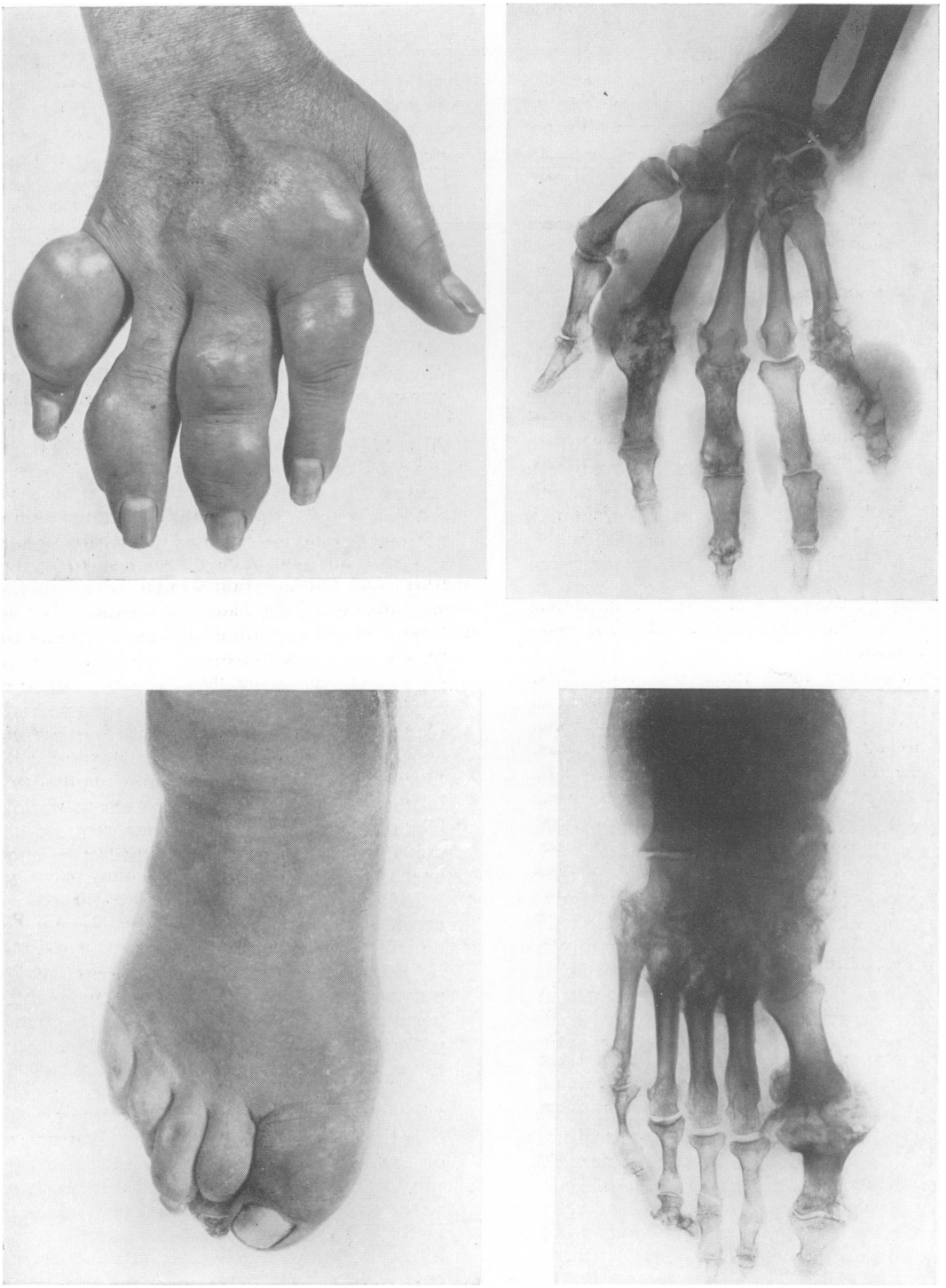

FIG. 1.—Clinical photographs and radiographs of a patient suffering from a gross form of chronic gout.

the superficial peroneal nerve became so tender near the base of the first left metatarsal bone that any pressure on it sent a shower of sparks towards one side of the great toe.

'Two days later we entertained with a hock at dinner, and again about 3 a.m. I was aware of a stinging pain, this time in the end of the left middle toe. I thought I must have cut the toe-nail too short and drowsed fitfully until daylight. Then came the discovery: the tip of the middle toe was just like a cherry plum and tender to the touch. My wife was amused. A colleague agreed with the diagnosis of gout, and Colchicine, 1/120 gr., repeated every six hours for about six doses, together with some acetylsalicylic acid, cleared all the symptoms. The cherry plum appearance of the toe disappeared in a few days, but the superficial peroneal nerve remains not quite normal.

'My gouty diathesis did not declare itself again until the Minister of Health announced some overdue financial rewards to general practitioners. This coincided with our local B.M.A. dinner, and champagne was the order of the evening. Again at about 3 a.m. I was awakened with a feeling of a splinter of glass under the toe-nail, now in the second right toe. Four doses of Colchicine and all was well.'

Gout may be the cause of a persistent painful arthritis of the knee joint, as the following case-history illustrates:

A woman, then aged thirty-two years, first complained of a painful and swollen knee joint in 1946. There was a previous history of an accident in 1939 causing synovitis of both knees for which she had attended hospital as an out-patient. In 1945 synovitis of one ankle joint developed for no obvious reason. On examination the right knee was said to be swollen, tender and full of fluid. The radiographs showed early arthritic changes so nondescript that they are not worthy of reproduction here. The sedimentation rate was 6 (Westergren); the central nervous system appeared normal to clinical tests.

The patient was given a course of diathermy and faradism to the quadriceps with some relief, but the condition returned after three months. The sedimentation rate rose to the upper limit of normal (10 and 12) and in 1947 two courses of penicillin and one of gold were given without any result. Two courses of lactic acid injections, further physical treatment and histamine ionization gave a measure of relief. A course of deep X-ray therapy was next contemplated.

I saw this patient in 1948, when there was a large fusiform swelling of the right knee joint, the quadriceps muscle was wasted, the joint was distended with fluid and movement was restricted. The plasma uric acid level proved to be 6. The reaction to colchicine was dramatic—the symptoms simply vanished and full movement of the knee was regained during the following year. Later she married and went abroad with her husband and a good supply of colchicine.

Gout may also mimic chronic strain of the wrist or a lesion of the rotator cuff of the shoulder. It may also be a cause of recurrent attacks of pain in the back. The following case-history illustrates some of these points:

In 1952 a lady aged forty-eight years attended the out-patient department complaining of pain for three months in the right wrist, thumb and index finger, with radiation up the arm to the shoulder. There was a recent history of a blow on the wrist from a swing door, but in fact she had had intermittent pain in the wrist and also in the back for a number of years. She had lived in the tropics and had suffered from sprue. The picture was further complicated by a chronic sinus infection. She had been treated by her general practitioner with all the usual 'rheumatic remedies.' On examination, movement of all joints in the right upper limb was full and free. On palpation there were no tender areas. Circulation in the hand was good in all positions. Radiographs of the cervical spine, shoulder and wrist were reported as normal. The plasma uric acid was 4 mg. per 100 ml. Colchicine was prescribed and produced immediate relief.

Colchicine dispensed indiscriminately to out-patients will seldom produce anything but disappointment. Given, however, to the right patient it is a 'wonder medicine' and its peculiar taste is immediately forgiven. Selection of the correct medicine for the disease is no new game: it has been practised with varying success from the time of Hippocrates and even earlier. It is a mental exercise in which the successful clinician excels.

Acknowledgment

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