considers the past." These are descriptions of the typical psychopath, unable to steer a steady course, seduced by each passing temptation, and certainly apply to two patients in the present series. No doubt this type of behaviour also occurs in the remaining patients to some extent, but the heart of the matter lies elsewhere. Their characteristic and common feature is lack of drive; the pattern of repeated failure is to be seen as due, not to lack of control, but to a profound enfeeblement.

Janet's (1903) words are more apt: "Presque toutes ces personnes présentent quelquefois depuis leur première enfance un caractère bien reconnaissable : ce sont des mous, des indolents, des paresseux." Janet distinguished his concept of psychasthenia, with obsession and rumination, from neurasthenia: "Certains malades sont très abouliques, ne peuvent plus faire attention et présentent de l'amnésie continue . . . chez ceux-la les troubles de l'obsession sont peu à redouter." He writes of mental sickness in a context where the term personality disorder is now preferred, but the point to be made is that the ineffectiveness of the patients here described is closer to the older concept of neurasthenia than to that of psychopathy, as now generally understood. Schneider, too, included asthenia in his list of psychopathies.

It is hardly surprising that this type of personality disorder has not caught the attention of writers to the same extent as the more troublesome unstable psychopath: it is of their nature to pass unnoticed. When, however, there is a strong social pressure to work, as in the present period of full employment or in times of war, their disability becomes apparent. The clinical impression of these patients upon me could be compared only with my experience of Army psychiatry, and in both instances patients were often referred for administrative reasons. In discussing the effort syndrome Lewis and Jones (1941) pointed out that symptoms were of little consequence in a man's decision to soldier on; more important was his attitude to military service. This is patently the same problem of adjustment as is presented by the present unemployed.

If, as I am inclined to believe, it is this type of personality disorder which forms the core of the disabled unemployed and not the "unstable drifter," the question of treatment remains. In the Army, group techniques tended to be developed (Foulkes, 1948; Maxwell Jones, 1952), which have since been continued by the Social Rehabilitation Unit at Belmont Hospital. Promising results are claimed—44% satisfactory adjustment on follow-up (Maxwell Jones, 1952)—in patients for whom the criterion for admission was social failure; but it is uncertain whether this outcome applies equally to the type of patient here discussed. By the showing of the present clinic, out-patient attendance alone is not sufficient to improve their level of adjustment. Rehabilitation may even be ill-advised for some patients at particular stages of their illness. Attempts to break down the defensive social isolation were found intolerable by the patient quoted above, who developed a reactive paranoid state when he was exposed to the stimulation of an occupational therapy centre.

The discussion of the differential diagnosis should perhaps have included the lay interpretation of laziness, as a description not of behaviour (as with Janet) but of motive. Nothing could be farther from the truth. The economic sanction of withdrawal of National Assistance benefit did not change the adjustment of the patient concerned, and, even if by these harsh means some were induced to re-enter employment, there is some evidence that they do not become productive workers (Markowe *et al.*, 1955).

When such conditions occur in wealthy men they are regarded as amusing eccentrics, like Goncharov's Oblomov; in poorer men, however, our society takes a sterner view. The possibility remains that, like Oblomov, these unhappy people can be neither treated nor coerced into becoming more productive citizens, but remain a charge on the kindly employer or the welfare services, even requiring the more able to search them out, for they are as ineffectual in seeking help as in all other things.

Summary

Attention is drawn to a type of personality disorder which was observed in patients attending a clinic for unemployed psychiatrically disabled men. This disorder is characterized by absence of drive and irresolution rather than by emotional instability as in other forms of psychopathy.

The response to out-patient treatment both in occupational adjustment and in mental health was unrewarding.

It is considered that, although these patients may not often be suitable for rehabilitation, they are almost always in great need of social welfare services.

I wish to thank Professor A. J. Lewis, honorary director of the unit, for his advice and stimulating criticisms, and Dr. M. Markowe and Dr. G. M. Carstairs for making available to me observations on patients under their care.

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THE FOOT AS A HALF-DOME

BY

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Although the foot is usually described as having medial and lateral longitudinal arches and a transverse arch, a few writers—for example, Ellis (1889) and Wood Jones (1949)—have compared the foot to a half-dome, the weight being transmitted from the talus to the periphery of the foot, which forms more or less a half-circle as seen in the footprint.

There are three sound reasons why this latter method of regarding the foot should be more widely taught.

(1) The trabeculae within the bones indicate the direction of weight transmission, and in radiographs of the individual bones of the tarsus the fan-like arrangement of the trabeculae in the navicular and their downwards and lateral direction in the cuboid are particularly noticeable. Sections through the bones show the pattern even better; in a longitudinal section through the calcaneum the trabeculae radiate forwards, backwards, and downwards, while in a cross-section of the calcaneum through the sustentaculum tali they splay downwards and laterally. If these trabeculae are projected on to the surface of the bones and the bones then articulated (Fig. 1), a picture is formed of a series of "half-arches" or "quarter-meridians" radiating from the talus to all the peripheral weight-bearing part of the foot (Fig. 2). Naturally there are still longitudinal and transverse arches, depending on how the foot is sectioned, but these arches are of no significance in the function of the foot unless the sections coincide with bony trabeculae.

(2) Most students have obviously, and unfortunately, obtained the ridiculous impression that a person uses only the longitudinal arches when walking, whereas between coming down on the heel and pushing off with the toes a

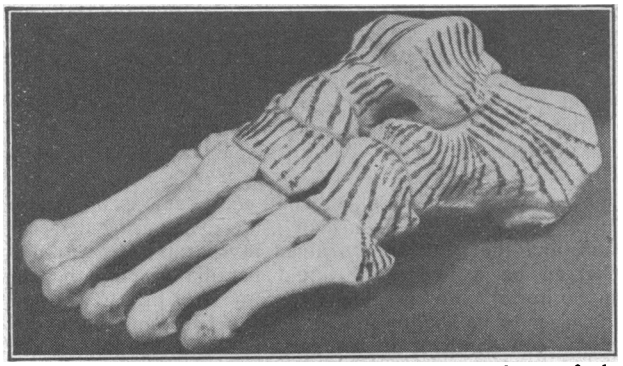

FIG. 1.—The trabeculae projected on to the surfaces of the articulated foot-bones.

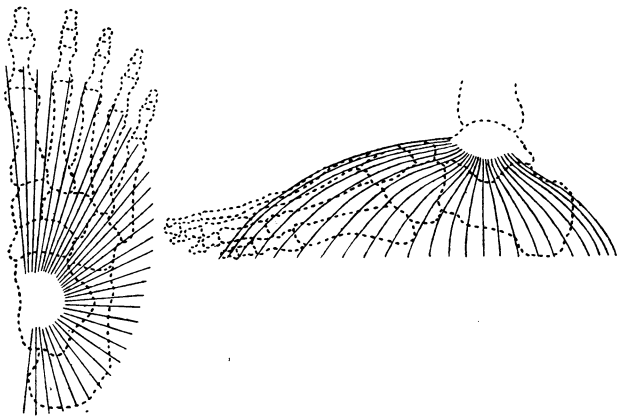

FIG. 2.—Diagrams to illustrate the relations of the half-arches to the bones of the foot.

walker bears weight, in turn from behind forwards, on all the half-arches. In fact, in the case of an in-toeing walker, who does not push off with his big toe (he uses the lateral toes), most of the strain is put on arches running neither longitudinally nor transversely, but obliquely. To describe the foot as having longitudinal and transverse arches only, simply does not cover this type of case.

(3) By comparing the foot to a half-dome, we get a better understanding of the deformities seen in flat-foot (or weak-foot). When a normal foot takes the weight of the body there is the well-known but variable elongation of the foot, because the half-arches, reaching anteriorly and posteriorly, have flattened or yielded under the strain. But what happens to the transverse and oblique half-arches? When they yield under the body weight they throw the summit of the half-dome—namely, the talus—medially. Fig. 3 shows a person sitting with his feet just a little apart; when he stands up without shifting his feet (Fig. 4), notice how the medial malleoli come together. In a case of flat-foot which is the result of faulty posture or weakness of muscles and ligaments, one obvious feature is the low medial border of the foot; but it is well known that in the normal foot the arching or doming may be very high or very low, so this feature is no criterion. If, however (Fig. 5), the talus and medial malleolus have been pushed medially and downwards to a marked degree (or, as it is sometimes expressed, have "rolled-in"), thereby giving pronation of the fore-foot and valgus deformity of the heel (Fig. 6), then there is no doubt that we are dealing with a foot whose doming or arching has collapsed.

Look again at the diagrams (Fig. 2) and the positions of the bony trabeculae in the foot (Fig. 1) and it becomes obvious that this is the only way in which a foot can possibly flatten out—that is, for the summit of the dome to be pushed medially as well as downwards. The alternative, were it possible, would be the summit sinking straight downwards, requiring a splaying out of the transverse and oblique half-arches at their peripheral weight-bearing ends, thereby producing a longer lateral border to the foot; but these half-arches, with a few exceptions, are contained within the calcaneum and therefore cannot separate from one another. Even if the calcaneo-cuboid and cubo-metatarsal joints were to open out (and there is no attempt at this in flat-foot), it would not be sufficient, because most of the transverse and oblique half-arches are behind these joints.

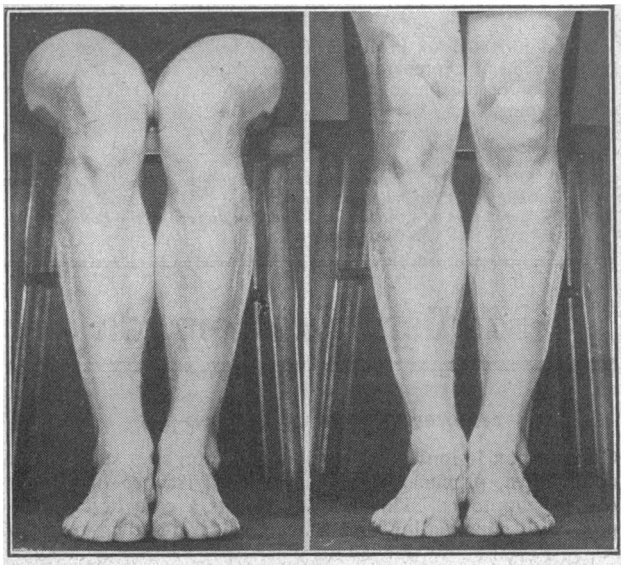

FIG. 3 FIG. 4

FIG. 3.—Feet bearing no weight: medial malleoli just a little apart. FIG. 4.—Same feet as in Fig. 3, and in same position but bearing body weight: medial malleoli now in contact.

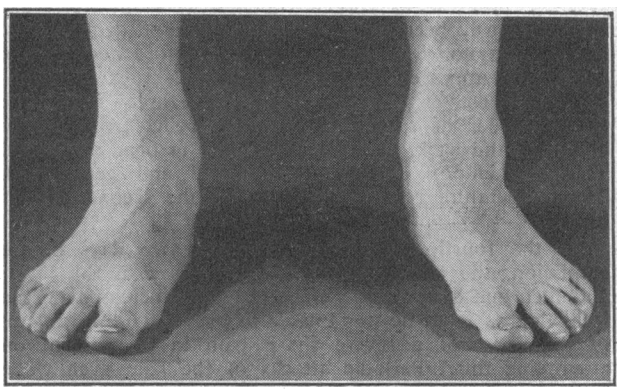

FIG. 5.—Flat-foot, showing pronation of forefoot.

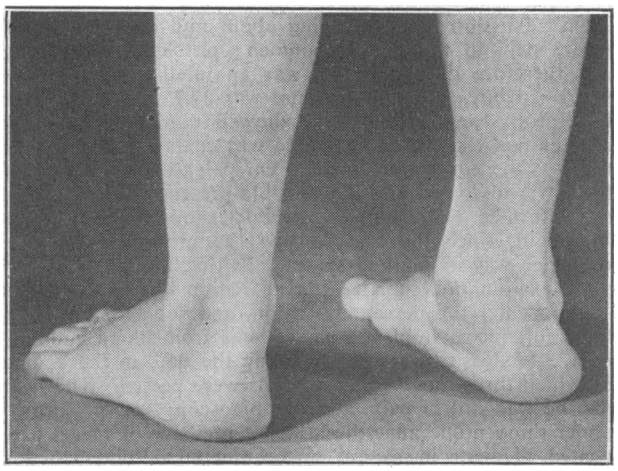

FIG. 6.—Flat-foot, showing valgus deformity of heel.

Summary

Comparing the foot to a half-dome has these three advantages over the older description: (1) It gives a true picture of how the weight is transmitted through the foot. (2) It forbids false impressions of how the foot is used in walking. (3) It allows of a better understanding of the deformities seen in flat-foot.

I am indebted to Professor R. D. Lockhart for his helpful criticism in the preparation of the paper; to Mr. A. Cain, A.R.P.S., for the photographs; and to Mr. W. Cruickshank for the diagrams.

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Medical Memoranda

Anorectal Ulcer in Chicken-pox

Chicken-pox lesions situated on uncommon sites such as the conjunctiva, prepuce, vulva, larynx, and trachea often give rise to symptoms. This report presents a case of chicken-pox, with constipation and a severe bearing-down pain, in which proctoscopy showed an ulcer of the anorectal region.

CASE REPORT

A boy of 12 was referred to the casualty department on April 7, 1953, as a possible abdominal emergency. He had previously been well, and his family and detailed past history was not significant. Six days before admission a skin lesion appeared on the left hip, and crops of lesions erupted each day during the next three days, the general order of spread of the rash being from hip to abdomen and back, to lower limbs, and to head and scalp. This chicken-pox eruption was heavy and generalized. The temperature rose to 38.5° C. on the second day of illness.

On the fourth day of the eruption, two days before admission, the boy complained of pressure in the lower abdomen and a desire to defaecate. This increased on the following day, but he was unable to pass a motion because of the onset of a severe sharp pain in his rectum on attempting this. Periodic attacks of the pain even woke him at night. As these pains increased in severity and frequency, he was referred to hospital. Micturition also became painful.

On admission he was rolling about and complaining of severe pain in the lower abdomen; physical examination was therefore difficult. He was an intelligent and well-nourished boy. The temperature was 37.7° C. The scalp, face, trunk, and lower limbs showed numerous scabbing chicken-pox lesions. The tongue was coated with a yellow fur, but the edges were moist. On palpation a fullness of the lower abdomen and the possible presence of a mass on the left side were noted. Rectal examination was not successful, since the boy resisted the procedure and the sphincter was in marked spasm. During a barium enema *x*-ray examination shortly after admission, the medium was seen to enter the descending colon, and soon afterwards a large soft faecal stool was passed, free from blood and scybala. Analgesics were given during the day, in the course of which three more bulky motions were passed. The next day he was still in pain, and sigmoidoscopy was performed under thiopentone anaesthesia. The presence of faeces prevented adequate inspection of the mucosa. Following this examination, apparently because of the dilatation of the anal sphincter, the patient experienced much relief, and it was possible to give cleansing enemata. On the third day of hospitalization proctoscopy showed a yellowish-grey ulcer about 8 mm. in diameter situated 2.5 cm. from the anal margin at about 2 o'clock, the surrounding mucosa being redder than elsewhere. The anal sphincter was then well stretched.

Much relief followed this second endoscopic examination, although he still complained of some pain during defaecation, and the sphincter remained in spasm. He was discharged on a regime of liquid paraffin by mouth and suppositories. Follow-up proctoscopy on April 13 showed the ulcer to be shallower with a clean base, and sigmoidoscopy to a depth of 10 cm. revealed no abnormality. On April 23 proctoscopy showed complete disappearance of the ulcer and a normal mucosa. The patient had no complaints. Full examinations of faeces and urine had been repeatedly negative.

COMMENT

The symptoms referable to the anorectal region appeared during the eruption of successive crops of chicken-pox lesions, and there was no other known cause for the ulcer, such as scybala, a generalized proctitis, or any trauma. It is almost certain, therefore, that this ulcer developed from a chicken-pox lesion. It was not possible to locate the site of the lesion in relation to the pectinate line, but the symptoms, the severe spasm of the sphincter, and the relief following stretching of the anus suggest that the ulcer was within the upper limits of the anal canal. This point is relevant because of the difference in histology between the rectum and the anal canal, the lining of the latter being transitional epithelium.

Although vesicles of the buccal mucosa are quite common in chicken-pox, there are few records of lesions in other parts of the alimentary tract. The usual clinical examination naturally does not reveal such lesions, and so benign a disease rarely yields necropsy material. Mitchell and Fletcher (1927) note two patients with "ileo-colitis" among 775 cases of chicken-pox. Bullowa and Wishik (1935) list appendicitis in five patients and intestinal intoxication in three among the complications in 2,534 cases of chicken-pox. It is probable that the above were unrelated to the initial illness. Dr. H. Stanley Banks (personal communication, 1953) has not encountered intestinal ulceration in chicken-pox.

Post-mortem reports on patients dying with chicken-pox occasionally refer to gastro-intestinal findings. Johnson (1940) described five small shallow ulcerations of the oesophagus in an infant of 7 months, the lesions showing areas of focal degeneration similar to those in the skin. Oppenheimer (1944) reported a premature infant dying at 11 days who showed disseminated necroses and intranuclear inclusions in the oesophagus, stomach, and intestines. Lucchesi *et al.* (1947) noted that the stomach of an infant of 12 days showed hyperplasia and hypertrophy of the surface epithelium and a few tiny scattered areas of necrosis associated with intranuclear inclusions. In a woman aged 32, whose case is described by Claudy (1947), the sole abnormality in the digestive tract was a few small haemorrhages in the crests of the intestinal folds. Numerous shallow ulcers of the oesophageal mucosa with chronic inflammation of the submucosa were noted by Frank (1950) in a woman of 34. Eisenbud (1952), in a necropsy on a woman aged 71, found a few small haemorrhages in the wall of the small intestine extending through the entire thickness of the gut. Hackel (1953) studied the necropsy findings in 11 patients who died with active chicken-pox and (personal communication, 1953) found no lesion of the gastro-intestinal tract.

The reports of visceral involvement in chicken-pox support the view of Scott (1951) that the virus is carried via the blood stream. There seems no reason, therefore, why