Jensen (1963) reported a case of so-called bilateral dislocation of the talus in a woman of sixty-four. The etiology of the lesion was not determined. The patient had had no trouble with her feet until she was forty-nine, when she began to get pain and valgus deformity. The pain ceased after six months but the deformities became progressively more severe. Jensen stated that he had not found references to similar cases in the literature.

Two patients with this deformity have been attending the Royal Orthopaedic Hospital, Birmingham. Before Jensen published his case I had been unable to find references to the lesion in the literature. The present cases are considered to be specially worth recording because there are radiographs showing progression of the condition in each case over a period of eighteen years.

CASE REPORTS

Case 1—A man aged fifty-nine attended in 1940 complaining of swelling and deformity of the left ankle and foot first noticed two years previously. A valgus deformity of the left foot was observed; excessive movements were demonstrable in the ankle and mid-tarsal joints. Pain and crepitus were caused by moving the joints. Radiographs taken in 1941 showed the head of the talus inclined medially but articulating normally with the navicular bone. Osteoarthritic changes were present in the talo-navicular joint (Fig. 1).

The patient was treated conservatively by various appliances. Symptoms waxed and waned over the years but became gradually more severe. Radiographs taken eighteen years after the first examination showed that the valgus deformity had markedly increased. The head of the talus projected medially and downwards and no longer articulated with the navicular bone (Fig. 2).
Comment—Only the left foot was affected in this patient. The dislocation of the talo-navicular joint was seen to progress over a period of eighteen years. Clinical and serological findings made it very unlikely that the lesion was neurotrophic in origin. No other lesion was found in this man except for osteoarthritis at other sites, especially in the right knee and in the cervical spine. Excessive movements and instability in the right knee and in the left foot were recorded at various times suggesting that this patient had some laxity of ligaments.

Case 2—A woman aged forty-eight attended in 1945 complaining of pain and swelling of the right ankle and foot of five years' duration. The pains had varied in intensity but had finally become severe. There was generalised swelling of the right ankle and foot and a valgus deformity of the foot. Radiographs showed some medial displacement of the head of the talus and osteoarthritic changes in the talo-navicular joint (Fig. 3).

Pains in the left ankle eased gradually and disappeared for a time but recurred in 1953, when the head of the talus could be palpated projecting on the medial side of the foot. At that time radiographs showed increase in the amount of displacement of the head of the talus. Osteoarthritic changes had markedly increased. A bony spur had developed on the navicular bone, presumably in an attempt to maintain the articulation (Fig. 4).

The condition progressed even more until the dislocation became complete. Radiographs taken in July 1963 showed an almost complete dislocation at the talo-navicular joint, with a long spur projecting from the navicular bone (Fig. 5).

For the past three years the patient has complained of similar symptoms in the left foot, and by July 1963 both feet were considerably deformed (Fig. 6). Radiographs of the left foot taken in July 1963 showed a condition similar to that of the right foot, though at an earlier stage (Fig. 7).

Comment—Some osteoarthritic changes were present in other joints but no evidence of a generalised disease was found. A neurotrophic etiology was excluded. This patient stated that for as long as she could remember her joints had “let her down.” She specified weakness of the wrists, knees and ankles and said that for many years she had “turned over on her ankles” long before she noticed the deformities.

DISCUSSION

This condition may affect either sex. It may occur on one or both sides. If bilateral, it is not necessarily symmetrical. It appears to begin in middle age and is slowly progressive.
FIG. 3

FIGS. 3 to 5
Case 2. Figure 3—Antero-posterior and lateral views of the right ankle in 1945. The head of the talus inclines medially but still articulates with the navicular bone. Osteoarthritic changes are present, and a buttress of bone projects from the navicular bone. Figure 4—Eight years later. There is increase in the medial inclination of the head of the talus and the buttress of bone is larger. Figure 5—Appearances in 1963. After ten more years there is almost total dislocation of the navicular bone from the head of the talus. Note the shadow of the bursa over the projecting bone.
Patients have had long periods when pain has eased completely. In all the cases the possibility of neurotrophic lesions has been excluded. No history of major trauma has been elicited. No associated condition apart from osteoarthritis of other joints has been found.

All three cases so far reported have had very similar clinical and radiological appearances. The only condition which might cause confusion would be congenital vertical talus in a late stage, but in that case the deformity would have been noticed long before middle age.

The etiology of the lesion is unknown. There was evidence of ligamentous laxity in the two patients described here. At the time of the original radiographic examinations both patients had well marked osteoarthritis of the talo-navicular joints. It is postulated that laxity of ligaments permits recurrent minor traumata to the talo-navicular joints, so that osteoarthritis develops. It is suggested that the osteoarthritis will then contribute to the progressive dislocation. Such an explanation would fit in with the known natural history of the lesion. Subluxation is known to occur in osteoarthritis both of weight-bearing and non-weight-bearing joints. Such changes are seen frequently in the hip joint and in the carpo-metacarpal joint of the thumb. The mechanism of such subluxation is not completely understood; it appears to be caused partly by bony changes and partly by ligamentous damage.

**SUMMARY**

1. Two cases of chronic progressive dislocation of the talo-navicular joints are discussed.
2. Radiographs are presented showing the development of the lesions over a period of eighteen years.
3. It is thought that the lesion is caused by laxity of ligaments and subsequent osteoarthritic changes.

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**REFERENCE**