Immigration into the United Kingdom has increased the possibility of encountering interesting variants of disease in the differential diagnosis of positive serological tests for syphilis (STS). Laird (1955) was the first to point out that many West Indians with positive routine STS had had yaws, usually in childhood. Several had evidence of typical old periostitis in the long bones.

Like many cities in the United Kingdom, Sheffield has immigrants from a variety of Commonwealth countries: the West Indies, Pakistan, Hong Kong, Somaliland, and Aden.

One of the variants of treponematosis is bejel, which like other forms, such as yaws, is associated with poor living conditions. Hudson (1958) has documented it as it occurs in Syria and Iraq. It was formerly common among the nomadic tribes near the banks of the Euphrates and Tigris rivers. Like other forms of non-venereal treponematosis it rarely leads to visceral, neurological, or congenital involvement (Csonka, 1953; Akrawi and Rahim, 1951).

An area on the west coast of the Arabian peninsula has been long recognized as one where bejel is or was endemic (Fig. 1). With the aid of an interpreter it was learned that the disease is sometimes known to the natives as bishel or belesh. A condition like crab yaws was called yarub or yaruva. Venereal syphilis is recognized as occurring in Aden, where it is called franji.

Two Adenese with positive STS who are believed to have had bejel are described below.

Case Reports

Case 1, a married male Adenese aged 29, was found to have positive STS on routine testing when he presented with acute urethral gonorrhoea. The standard Wassermann reaction (WR) was positive 1:40, the Kahn test +++ positive and the Reiter protein complement-fixation (RPCF) test was also positive.

Though he came to the United Kingdom from Aden, the patient had been born in the country outside the protectorate. There was no previous history of venereal disease or of bejel, but he had had, at the age of 14, a red, painful swelling on the anterior aspect of the right leg. The family history was unhelpful.

Examination.—The teeth were carious but non-Hutchinsonian. There were no stigmata of congenital syphilis. There were no signs of late syphilis in any system.
The blood pressure was 170/90. The serological tests were repeated and the previous results confirmed. The treponemal immobilization (TPI) test was also positive. The cerebrospinal fluid was normal, but the WR was positive though the RPCF test was negative. (The positive WR was believed to be of no clinical significance).

A chest x-ray was normal but x-rays of the legs showed gross cortical thickening of the left tibia with anterior bowing (Fig. 2).

Case 2, a married Adenese male aged 32 years, attended with non-specific urethritis. Routine STS showed the WR and Kahn test to be negative, but the RPCF test was positive.

Though this man came from Aden he had been born and bred in a village in the country outside the town and the protectorate. No previous history of venereal disease or bejel was admitted. A tuberculous pleural effusion had been diagnosed 2 years earlier and anti-tubercular treatment had been completed. No other anti-treponemal drugs could be traced. The family history was unhelpful.

Examination.—He had a pock-marked face. Scars on the chest wall and penis were said to have resulted from burns in childhood. Both tibiae were thickened and bowed anteriorly. There was no evidence of congenital or acquired syphilis in any system. The fundi had extensive white areas adjacent to each optic disc which the ophthalmologist considered to be a congenital anomaly of no pathological significance.

The serological tests were repeated. The WR and Kahn test were negative, the RPCF test positive, and the TPI test weakly reactive. The cerebrospinal fluid was normal, with negative WR and Kahn test.

The chest x-ray was normal but x-rays of the tibiae showed sclerosis of the middle thirds with widening on the right side (Figs 3 and 4, opposite). Intravenous pyelogram and urethroscopy were normal.

Discussion

The differential diagnosis in both cases lies between latent syphilis, congenital syphilis, and bejel. Latent syphilis was ruled out by the absence of history and the presence of bowed tibiae; and congenital syphilis by the absence of other stigmata.

The diagnosis of bejel is supported by the social history. Both men had apparently spent their childhood in the known bejel area of the Arabian peninsula near the Yemen and outside the protectorate. It is probably from this area that our patients came to Aden in the first place and later to the United Kingdom.

According to Csonka's experience, a history of bejel was comparatively easy to obtain, but Hudson writes of difficulty in eliciting a history. The first patient undoubtedly had had periostitis, but no such history was given by the second. Similarly, in our experience with West Indians, a past history of yaws is denied even when a gross degree of tibial thickening and bowing is present.

Clinical and radiological evidence of old periostitis compatible with treponemal disease is very suggestive of bejel. As in other parts of the world where non-venereal treponematoses occur, congenital syphilis would be extremely rare outside the main towns. A third point in favour of the diagnosis of bejel in Case 2 is the negative and low-titre results of the

Fig. 2.—Case 1, x-ray of left leg bones.
serological tests. This is the type of result commonly associated with a history of childhood yaws in West Indian immigrants.

All in all little doubt was felt that the diagnosis in both patients was bejel. If the findings had been made in West Indian men rather than Adenese we should have had little hesitation in concluding that the diagnosis was yaws. The parallels appear inescapable.

Summary

Two immigrant patients of presumed Adenese origin were found to have positive STS in the absence of history or findings of congenital or acquired syphilis. Both men were born and bred in a known bejel area. Both showed clinical and radiological evidence of previous tibial periostitis with anterior bowing. Both are believed to have had active bejel at some time.

It seems likely that, with continued immigration from the Arabian peninsula, the diagnosis of bejel may be made more often in the future.

I should like to thank Dr R. S. Morton for his helpful criticism.

REFERENCES


Le béjel à Sheffield

Résumé

On a trouvé deux immigrants d’origine présumée d’Aden donnant le test STS positif en l’absence de toute historique ou de signes cliniques de la syphilis congénitale ou acquise. Les deux hommes sont nés et ont été élevés dans une région où le béjel sévit. Tous deux montrent des signes cliniques et radiologiques d’une périostite antécédente du tibia avec courbure antérieure. On pense que les deux malades ont eu antérieurement une attaque aiguë de béjel. Il semble probable qu’avec l’immigration continue de la péninsule arabique, le diagnostic du béjel sera, peut-être, fait plus souvent à l’avenir.
Bejel in Sheffield.

P M Wray

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