

CLUTTON'S JOINTS (A case report)

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Summary

A case of Clutton's joints is reported. The patient showed bilateral hydrarthrosis of knee joints. He also had bilateral iridocyclitis. Skiagram of the knee joint showed increased joint space (suggestive of synovitis) and absence of any bony changes.

Late congenital syphilis is known to produce varied clinical manifestations and one of them is bilateral, more or less painless effusion into knee joints first described as a clinical entity by Clutton in 1886¹. In his series of 11 cases bilateral involvement of knees was present in all. All had bilateral interstitial keratitis at some time or other and 4 of them had osteitis of the tibia. Although Clutton himself mentioned that in 3 of his patients there was definite tenderness around the knee joints, subsequent writers invariably referred to this condition as painless and bilateral. We had recently an opportunity of seeing this condition and in view of the rarity of the condition we are reporting it.

Case Report

A 7 years old male child belonging to the Harijan community presented with the complaints of swelling of knee joints of 2 months' duration, progressive diminution of vision of both eyes

of 3 weeks' duration and redness of right eye of 3 weeks' duration. The complaints started 3 months prior to his hospital visit with low grade and continuous fever which lasted for one month. Fifteen days after the onset of fever, patient developed slight distension of abdomen, which gradually subsided in 15 days. Following this he developed swelling of the right knee joint and 5 days later swelling of the left knee joint. The swelling was progressive. He took few tablets from a local medical practitioner which did not in any way affect the course of the disease. There was no trauma prior to the onset of the complaint. There was no history of cough with expectoration or sore throat.

The family history is shown in the chart.

Physical Examination

Patient was emaciated and anaemic. General and systemic examinations revealed no abnormalities. There was boggy swelling of both knee joints with tenderness. The muscles of thighs and legs were wasted (Fig. 1 and 2). Right eye showed congestion. Cornea was clear. Change of pattern of iris was

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Received for publication on 6-6-1977.

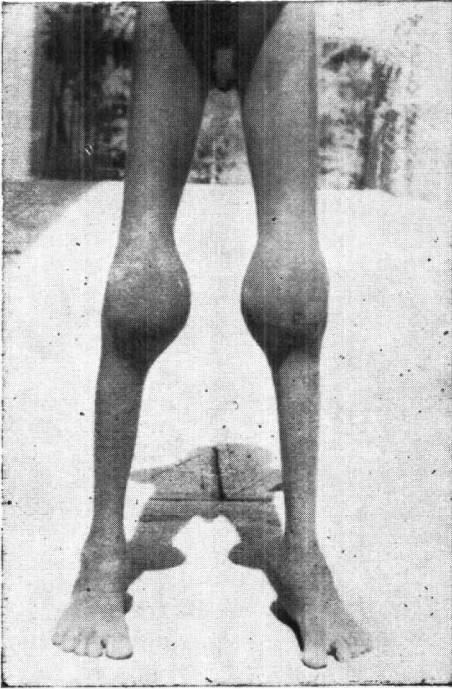


Fig. 1 Bilateral hydrarthrosis and wasting of muscles of thighs and legs.

present with sluggish pupillary reaction and broken pattern synichea. Left eye showed broken pattern synichea but no other abnormalities. Ear, nose and throat examinations were normal.

Investigation

Hb was 7 G %, E. S. R. 115 m.m. at the end of first hour. W. B. C., T. & D, V. D. R. L., Serum uric acid, fasting blood sugar, PPD, Rose Waaler's test, C. S. F. including CSF, VDRL and Chest X-ray showed no abnormalities. X-ray of knee joint revealed increase in joint space and no bony involvement.

Discussion

The onset of Clutton's joints may be at any age upto 21 years². Nabarro² in his series of 61 cases of joint involvement due to congenital syphilis found Clutton's joints occurring between the ages of 3½ to 18 years, the commonest age of having been 5-10 years. The age of patient reported here is 7 years. Males and females are equally affected².

In the case herein reported the onset of the disease was spontaneous as in most earlier reported cases. Nabarro elicited history of injury prior to the onset of complaint in 8 of his cases.

This condition is usually bilateral but may appear only on one side.

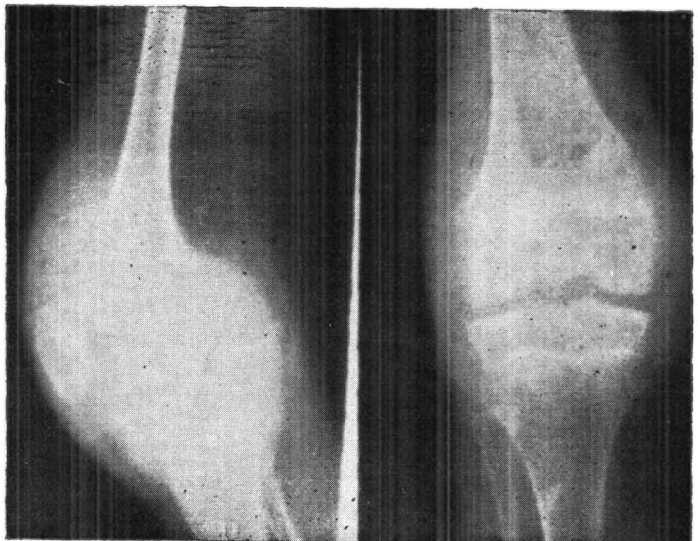


Fig. 2 X-ray photographs of knee, A.P. and Lateral views, showing increased joint space without any bony changes.

Rodin³ found five cases of this condition among 104 cases of late congenital syphilis. Four of these patients attended with typical bilateral hydrarthrosis of knee joints, although in one case there had been an interval of 6 months before the second knee became involved. In the 5th case, the onset was at 24th year and 6 years elapsed before the second knee became involved. Interval between involvement of second knee was 2 years in one of Clutton's original cases, 3 years in one of Nabarro's cases² but only 5 days in our patient.

Though this condition is generally described as a painless effusion, it can be painful at times^{1,2}. Barella et al⁴ described 8 cases of Clutton's arthropathy and in their experience the presence of slight fever and signs of inflammation in the involved joints were more typical findings than the painless symmetrical swelling described by Clutton. In our case the condition was heralded by mild fever and there was minimal tenderness at the time of examination.

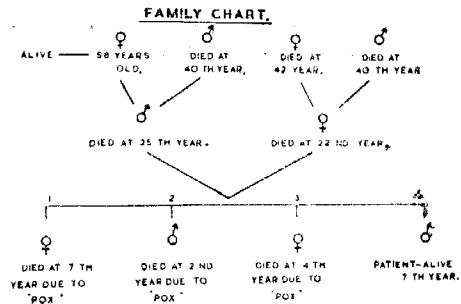
Clutton¹ found bilateral interstitial keratitis in 10 out of 11 cases, whereas in Rodin's³ 5 cases, this feature was found only in one and that was also unilateral. In our case, there were only changes of iridocyclitis in both eyes. Such changes in late congenital syphilis were also earlier documented⁵.

Blood test for S. T. S. was negative in our case. Nabarro² reported a case of congenital syphilis with osteoarthritic manifestations in whom S. T. S. was negative but positive in the mother. We could not investigate our patient's parents who were deceased. It is likely that as in some cases of late syphilis the VDRL might become negative though the disease process itself might not have become wholly extinct. Besides, Clutton's joints is considered to be more of a hypersensitivity reaction than a manifestation of direct effects

of infection. King and Nicol⁶ also mention that some cases of congenital syphilis exhibit negative reagin tests.

The distension of abdomen observed during the initial period of illness may have been the result of malnutrition and hypoproteinemia.

Radiologically there was increased joint space suggestive of synovitis and no bony involvement (Fig. 3). This is



considered to be the most characteristic feature of this condition. Though tuberculosis can produce synovitis, it is usually attendant with some bony changes. Therefore inspite of a non reactive VDRL test we consider this to be a case of Clutton's joints.

Treatment

Patient was treated with 400,000 units of procain pencilline for 15 days (total of 6 mega units), prednisolone tablets 5 mg., twice daily and hydrocortisone and atropine ointments to the eyes. Though the eye condition improved, joint swelling did not subside. At this stage we wanted to test the blood of the paternal grand mother for S. T. S. and planned for aspiration of synovial fluid and synovial biopsy, but unfortunately both patient and grand mother absconded.

Acknowledgment

We express our grateful thanks to Dr. K. B. Krishna Mohan Superintendent, government

General Hospital, Kurnool for having given us permission to send this article for publication.

We express our thanks to the Departments of Radiology, Ophthalmology, Microbiology and Biochemistry for the help rendered in carrying out the investigations.

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