

Unusual Case of a 13-Year-Old Male with Blount's Disease Who was Unable to Walk: A Prevention Lesson

Sir,

Blount's disease, with or without complications, is not usually encountered in primary care centers. It is important to diagnose this disease in infants as early as possible to administer treatment, thereby allowing the infant to grow normally and avoid serious complications as the infant grows.^[1-6]

However, some primary care physicians might have not received sufficient training to be able to detect this disease in infants. Therefore, it is important to educate all family physicians about Blount's disease so it can be detected and referred to a pediatric orthopedic surgeon for early treatment.^[1,7] In addition, the family physician should undertake the responsibility of following the child and family throughout the period of treatment to take care of all psychological, physical, and social aspects of the disease. This case has been chosen to increase the awareness of all primary care physicians about Blount's disease and its complications.

A 13-year-old Saudi male came to Primary Care Clinic in a Tertiary University Hospital, in Riyadh, Saudi Arabia. The patient arrived in a wheelchair with his mother; he was obese and looked worried and depressed. The patient was unable to walk and it was difficult for him to stand without support to be weighed. The patient's weight was 117 kilos, height 151 cm, and body mass index 51.3%. The child was born with no obvious abnormalities but

when he started to walk his mother noticed that both of his legs bowed as his weight increased, until ultimately he was unable to walk and resorted to using a wheelchair. At 7 years of age, the patient underwent surgery on both legs, but there was no clinical improvement and he was still unable to walk and still relied on his wheelchair for mobility. Even though, his mental function was normal, the child did not enter regular school due to his illness. As a result of his delay in commencing school, he entered a school which specialized in providing education for handicap child with normal mental function.

On examination, both lower limbs (*Lower limbs are below the knee*) were edematous, the skin reflected the patient's previous surgical procedures, and both legs were bowed. The X-ray of both the right and left leg are shown in Figures 1 and 2. The patient's vital signs, cardiovascular and chest examination, speech, hearing, sight and other examinations were normal. The patient's fasting blood sugar, lipid profile and renal function were normal.



Figure 1: X-ray of right leg.



Figure 2: X-ray of left leg.

The CBC investigation was unremarkable except that the erythrocyte sedimentation rate was 29. In addition, there was a mild elevation of liver enzymes, which might be secondary to fatty liver with morbid obesity.

It is important to highlight that when this patient was seen with his mother in the primary care clinic, he was unable to walk and was brought in by his mother in a wheelchair, which he used all the time, even at home. This raised alarming questions as to why this patient had been allowed to reach this stage and what role the primary care physician had played. This only emphasized the importance of educating primary care physicians in the early detection of Blount's disease and to utilize radiological facilities to confirm the diagnosis.^[8] Early diagnosis at the primary care level will also avoid serious complications, which affect a patient's social life and psychological well-being and will also enable the patient to be referred to a pediatric orthopedic surgeon to develop a suitable management plan. Delayed referral to an orthopedic surgeon usually results in greater surgical treatment.^[9,10]

In conclusion, it is recommended that family physicians in primary care clinics should be aware of Blount's disease and trained in its early detection as primary care physician is the first point of contact of patients. Also, it is recommended that infants and children should be referred early to a pediatric orthopedic surgeon to determine the most suitable management plan in accordance with the patient's clinical and radiological findings. Ultimately, this will prevent patients from experiencing complications.

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Conflicts of interest

There are no conflicts of interest.

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