

Wind Swept Deformity Treated With Guided Growth Procedure

Hazizul Helmy H, Emil Fazliq M, Ismail M, Abdul Razak S

Department of Orthopaedics, School of Medical Sciences, Universiti Sains Malaysia, 16150 Kota Bharu, Kelantan

Wind swept deformity of the knee in children can be seen in vitamin D resistant ricket . It is also seen in Blount's tibia vara associated with physiological valgus deformity in the other knee; tibia valga with a physiological varus component; and Blount's disease coexisting with tibia valga.

We report two patients presented at the age of 3 years old. Both children had varus left knee and valgus right knee. Radiograph of left knees showed feature of Blount disease Langeskiold stage II while the right knee did not show any abnormal growth plate. The skeletons and electrolytes were otherwise normal. The left knee varus was corrected with guided growth of proximal tibia in both patients. In the first patient, the right knee were left untreated with the hope for self correction. However it got worse after 2 years and required guided growth of medial distal femur growth plate. In the second patient, guided growth of medial distal femur growth plate was doen together with the left knee, thus he got correction earlier.

DISCUSSION:

In both of our patients, left knee went into varus between age of two to three years old. During this age, the normal right knee was undergoing physiological changes into valgus. We think, the compensation or adaptation to the abnormal knee make the force to lateral side of the valgus knee in compensating the left knee varus created growth imbalance and make the valgus worsen. OO Oni et al treated most of the patient with the similar pattern of wind sept deformity with serial casting (2). While Smith treated with valgus osteotomy of tibia for the varus knee and varus osteotomy of both tibia and femur for valgus knee (3).

CONCLUSION

The contralateral knee valgus that make wind swept deformity in unilateral Blount disease does not correct spontaineously, thus need treatment.

REFERENCES

1. Petje G, Meizer R, Radler C, Aigner N, Grill F. Deformity Correction in Children with Hereditary Hypophosphatemic Rickets Clin Orthop Relat Res. 2008 Dec; 466(12): 3078–3085.
2. O O Oni, H Keswani, and M O Aganga . 'Windswept deformity'. Arch Dis Child. 1983 Jul; 58(7): 541–543.
3. E. H. J. Smyth . Windswept deformity ; JBJS. 198062-b, no. 2, 166-167