RECALCITRANT WINDSWEP KNEE DEFORMITY WITH UNDERLYING BLOUNT DISEASE

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Introduction: Windswept deformity is an abnormal appearance of both knees which one knee is in valgus deformity and another knee in varus deformity1. Windswept deformity knee deformity is an uncommon clinical condition and has a variety of causes.

Discussion: A 3-year-old boy presented with a windswept knee deformity. His parents noticed he had an abnormal gait when started to walk at age of 11 months. He was overweight and no dysmorphic features. The left knee was 20-degree varus; the right knee was 30-degree valgus. Metabolic bone disease investigations were negative. He was diagnosed as left knee Blount disease and right distal femur lateral condyle hypoplasia. The latter deformity may be due to the physiological compensatory mechanism. Left lateral proximal tibia hemiepiphysiodesis was performed using Sherman plate at 3 years old. Right distal medial femur hemiepiphysiodesis was performed at 4 years old. Removal implant was performed when windswept deformity was corrected at 5 years old. When he is 7-year-old, windswept deformity recurred progressively. The right knee valgus is 20-degree and externally rotated; the left knee varus is 15-degree and internally rotated. The right patella is dislocated. Windswept deformity knee deformity is rare and has various causes in paediatric, such as metabolic bone disease, Blount disease or trauma. The guided growth concept was popularised by Steven using 8-plate2. The 8-plate work as a tension band plate, restraining the physis2. In our centre, we use the Sherman plate as guided growth instead of the 8-plate, both plates have a similar function and design. Gradual correction via guided growth avoid the risk of neurovascular and muscle injury compare with acute correction

Conclusion: Rebound phenomena are common after the removal of guided growth, so close monitoring is essential as the child grows.