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Short Communication

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Equinus of the Foot in Children and Adolescents; Short- and Medium-Term Results (300 Cases)

Jean-Noël Ligier

Clinique Diaconat, 1 rue Saint Sauveur, 68100 Mulhouse, France

Corresponding author
Jean-Noël Ligier, Clinique Diaconat, 1 rue Saint Sauveur, 68100 Mulhouse, France.

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Introduction
Equinus of the foot in apparently healthy children and adolescents is common when it is investigated, with the knee extended and the hindfoot in slight varus to eliminate the talus component of the everted subtalar joint. This equinus covers various pathologies. The dual objective is to treat this equinus and also the associated pathologies in a prospective study of 300 cases.

Material and Methods
300 cases were reviewed. In order of frequency, there were 104 Sever's disease, 57 idiopathic tiptoe walking (ITW), 51 recurrent sprains, 39 idiopathic flat feet, 29 hallux valgus and 29 miscellaneous pathologies including 8 metatarsalgia, 6 plantar pain and 7 Achilles pain. There were 11 associations.

The treatment of equinus consisted, for the most part, of self-stretching of the calf muscles morning, noon and evening and in 13 cases of bilateral percutaneous lengthening of the Achilles tendons.

Results
Equinus disappeared in all 300 cases reviewed within one and sometimes two months. All Sever's disease resolved except two, which recurred later. Of the 57 ITWs, 29 were plantigrade, including 13 Achilles lengthening injuries. 22 were improved, and seven were not. Of the 51 recurrent sprains, without exclusion, all had equinus of the foot. Of the 41 cases contacted or reviewed with a follow-up of six months or more, 36 had no recurrences, three had true laxities, two of which were operated on, and two had recurrences.

All 39 flat feet, seen after the age of 10, had equinus. Without sufficient follow-up, we noted six normalizations and 17 improvements, and nine without improvement. All 29 hallux valgus cases, without exclusion, presented equinus; 13 cases underwent surgery after calf muscle self-stretching.
The 29 various pathologies were cured or improved.

Discussion
Equinus is easily eliminated through proper self-stretching. Treatment of Sever's disease requires neither physical therapy, heel lifts, nor prolonged periods of inactivity. Treatment of tiptoe walking could begin with stretching the gastrocnemius muscles, and in severe cases, with percutaneous lengthening of the Achilles tendons.

The systematic presence of equinus in recurrent sprains appears to be a new finding, the treatment of which brings great satisfaction. Treatment of equinus in idiopathic flatfoot remains an essential prerequisite for hollowing the arch of the foot. Equinus in hallux valgus has already been discussed by P. Barouk, who explains its pathophysiology and treats it during the procedure by lengthening the gastrocnemius muscles.

Conclusion
The search for equine should be systematic in certain pathologies and its treatment could very often lead to the improvement or even the cure of these pathologies.

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