Follow-up Note on the Articles Previously Published in the Journal of Bone and Joint Surgery: A Methode for the Treatment of Resistant Congenital Club Foot in Infants by "Leverage-Wire Correction"

by

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In 1962 a method for the gradual correction of resistant congenital club foot by Leverage-Wire Correction was described in the Journal of Bone and Joint Surgery (44-A).

We do still advocate the method in the treatment of resistant congenital club foot in infant. Our total series of the treatment from 1949 to 1970 amount to 89 feet of 59 patients. They are somewhat less than half of our total series of 127 patients treated by various means. The ideal of the treatment of congenital club foot consists in early treatment, viz. it should be started in newborn with conventional orthodox treatment, of which fundamental techniques are manual correction and skillfull fixation. The important point of the leverage-wire correction consists in the procedure of gradual correction with the sense of touch, which has been obtained by the experience of manual correction. Therefore, it differs greatly from machinery wiretraction with Shede's apparatus. The essential requirement for performance of the leverage-wire correction is to master conventional method so as to obtain efficiently the sence of touch in manual correction. Without proper preparatory training, one could not obtain sufficient results with the leverage-wire correction for the sake of bone and skin injuries.

In the journal in 1962 we recorded 22 feet of 14 cases with excellent and good results, of which 18 feet of 11 cases (82%) were followed up september 1971. The follow-up study did not reveal conspicuously different findings from those previously published. Aggravation of bone deformities especially the flattening of the trochlea tali was not observed in the cases which had no marked deformities before surgery. In some cases the ugly talus due to dysplasia of the caput tali et collum tali was observed. However, it was also observed in the talus of contralateral so called normal foot. This findings and hypoplasia of the tuber calcanei are assumed to be due to suppressed growth tendency which is one of essential characteristics of the deformity.

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The age of patient at the follow-up ranged from 13 years and 6 months to 25 years and 5 months. Nine cases (82%) were above 20 years of age. The period from initial treatment to follow-up examination ranged from 13 years and 5 months to 22 years. It was more than 20 years in 6 cases (55%).

Results at the recent follow-up:
Excellent—3 bilateral and 2 unilateral cases. Good—2 bilateral and 1 unilateral cases. Fair—2 bilateral and 1 unilateral cases. In other words, the results were excellent in 8 feet, good in 5 and fair in 5. Poor result was not observed.

As to the cases with poor results, we prefer to triple arthrodesis at the suitable age, before that a splint being applied. It is not our choice to employ such surgical procedures for correction as extensive ligament release or wedging osteotomy. The triple arthrodesis was carried out in 5 feet of 4 cases out of 7 feet of 5 cases with poor results previously reported in 1962.

Ando抄録

抵抗性乳幼児先天性足趾に対する
「板にて矯正法」の遠隔成績に関する覚書

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1962年 J. B. J. S (44-A)に、わたくしは抵抗性乳幼児内反足に対する「板にて矯正・牽引法」を発表した。本法はSchedeの尖足矯正を用いる独流の治癒とは異なりorthodoxな整形外科的手技をマスターした医師でないと良好な治療成績をあげることは困難であり、それが本法の長所でもあり短所ともなる。1949—1970年間にわたくし及び身近なる同僚の行った本法は50人、89足であり、それはその間に行った先天内反足治全患者127人の半数に達しない。先天内反足の理想的治療法は新生児期における用手矯正を基盤としたconventional orthodox治療にあるからである。しかしこのconventional治療法は一般的に医師の技術の未熟と治療法の戸籍および性児の無理解と経済的理由からその成績は必ずしも良好ではない。本法の応用が必要となる例が少なくはない、それでもこの固有の予防的訓練を行なった人でないと本法にて骨及び皮膚損傷を来し十分な成績を収めることはできない。

1962年 J. B. J. Sに優及び良として報告した14人・22足中1971年までに追跡できた11人・18足（82%）は優8足、良5足及び不良5足であり、不可例は1例も見出せなかった。すると、術前すでに骨変形の認められた例以外では、本法による骨変形なくずに非常常歩行の扁平足が完全に見出されなかった。不可例に対しては、われわれは triple arthrodesisを行い、その適応年令に達しない患者にはもっぱら splint あるいは補助靴を使用させ、広汎な ligament release または wedging osteotomy は行わない。1962年報告の不可例7足中5足に対してはすでに triple arthrodesisを行って満足な結果を得ている。なお、再調査においてける患者の年令は13才6月から25才に及び、20才を超えたものの82%を占めている。

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