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RESTRAINT IN THE TREATMENT OF A BOWED TIBIA ASSOCIATED WITH NEUROFIBROMATOSIS

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Accepted 3.ii.75

A boy, then aged 9 months, was seen in November, 1952 with bowing of the right tibia, as shown in Figure 1. Apart from more than 20 "café-au-lait" spots typical of neurofibromatosis no other abnormality was found on skeletal survey or full paediatric investigation. Apart from unavailing attempts during the first year to modify the deformity by serial plasters he has had no further treatment. He has had no complaints and no loss of function. Since leaving school at the age of 15, 7 years ago, he has been employed doing heavy work in a brewery stacking 500 cases a day each weighing 30 lbs. He has never had problems in obtaining or wearing shoes and can run without difficulty; his gait is normal, his legs of equal length and he has no callosity under the sole of either foot.

Clinically he still retains considerable bowing and radiologically (Figure 2) the apex of the curve has moved proximally with growth, and the angular deformity has decreased from 42° to 22° . His right ankle joint is tilted 17° , in relationship to the standing surface, compared with the left. It shows no sign of degenerative change.

DISCUSSION

No operative treatment was considered in this case because of the known dangers of pseudarthrosis, a fear confirmed by Hardinge (1972) who in 100 cases of pseudarthrosis found that 21 followed corrective osteotomy. Although this complication can be treated by the specialised procedures of MacFarland (1939), Boyd (1941) and Charnley (1956) the treatment is necessarily prolonged and often results in shortening of the affected leg up to $3\frac{1}{2}$ inches (7.7 cm).

In any case if operative treatment is considered essential it should be delayed at least until after 33 months and ideally until late adolescence

*Figure 1.**Figure 2.*

when correction of the alignment of the ankle with the standing surface can then be undertaken through normal bone.

SUMMARY

A 20-year follow-up in no way suggests that an active programme of treatment could have improved this patient's function and clearly it could have resulted in much worse cosmesis.

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Key words: bowed tibia; neurofibromatosis; tibia, treatment

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