

Determinants of casting phase duration for clubfoot treatment with Ponseti method in Swaziland.

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Background: The management of club foot is still a challenge, particularly in developing countries. Neglected clubfoot will result in a foot that has poor function, is stiff, painful and prone to early arthritis. The Ponseti method is the current gold standard to effectively render a pain free plantigrade foot and to prevent recurrence and extensive surgery. We sought to determine the effects of age at initiation of treatment, clubfoot severity and previous non Ponseti management on the duration of the corrective phase.

Methods: A retrospective review of data on all patients treated successfully with the Ponseti method at the Mbabane Government Hospital between March 2010 and June 2013.

Results: There was no significant difference in the mean number of casts between the two age groups. An almost twofold increase in the mean number of casts was found in the group with Pirani score above 4.5 versus a Pirani score below 4.5 ($p=0.0001$). Having previous non Ponseti treatment did not affect the treatment duration ($p=0.180$).

Conclusions: The number of casts needed to correct clubfoot is positively associated with the severity at presentation. Parents of children with severe deformities should thus be informed of this association with the aim to improve compliance.