

Geometry of the Bandaging Procedure and Its Application while Wrapping Bandages for Treatment of Leg Ulcers

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Abstract : Appropriate compression bandaging is important for compression therapeutic medical diseases. The high compression approach employed for treating venous leg ulcers should be used correctly so that sufficient (but not excessive) pressure is applied. Bandages used to treat venous disease by compression should achieve and sustain effective levels and gradients of pressure and minimise the risk of pressure trauma. To maintain graduated compression on the limb the bandage needs to be applied at same tension for each layer from ankle to the knee. In this paper the geometry for various bandaging procedures is used to wrap each layer of bandage by marking the relaxed length of the bandage. The relaxed length is calculated depending on the stretch, average circumference of the limb on which it is to be applied and the bandaging technique to be used. This paper aims at developing a scientific approach while applying the bandage to reduce the inter operator variability in applying same tension on each successive layer of bandage.

Keywords : bandaging, compression, inter operator variability, graduated, relaxed length, stretch

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