

The role of vacuum pump therapy to mechanically straighten the penis in Peyronie's disease

Amr Abdel Raheem, Giulio Garaffa, Tarek Abdel Raheem, Michelle Dixon, Amanda Kayes, Nim Christopher, David Ralph

Abstract

Objective: to assess the efficacy of vacuum therapy in mechanically straightening the penile curvature of Peyronie's disease (PD).

Patients and methods: Modelling of the tunica albuginea has been shown to be possible during penile implant surgery and this principle has been applied as an alternative conservative therapy. In all, 31 patients with PD (mean duration 9.9 months; mean age 51 years, range 24-71) completed the study. Over a 12-week period, the patients used a vacuum device (Osbon ErecAid, MediPlus, High Wycombe, UK) for 10 min twice daily. The assessment at study entry and at completion after 12 weeks included the International Index of Erectile Function questionnaire, a perceived pain intensity score, stretched penile length measurement and the angle of penile deformity after an intracavernous injection with prostaglandin E1.

Results: there was a clinically and statistically significant improvement in penile length, angle of curvature and pain after 12 weeks of using the vacuum pump. Of the 31 patients, 21 had a reduction in the angle of curvature by 5-25 degrees, three had worsening of the curvature and there was no change in the remaining seven. The curvature was corrected surgically in 15 patients while the remaining 16 (51%) were satisfied with the outcome.

Conclusion: vacuum therapy can improve or stabilize the curvature of PD, is safe to use in all stages of the disease, and might reduce the number of patients going on to surgery.