Effectiveness of Transdermal Electromotive versus Intralesional Injection of Verapamil and Dexamethasone in Treating Peyronie's Disease

Introduction and Objectives: To compare the effectiveness of transdermal electromotive versus intralesional injection of verapamil and dexamethasone in treating Peyronie's disease.
Materials and methods: From 6.1.2010 to 6.1.2011, 60 patients with Peyronie's disease and a history of <24months, non-calcified plaques and diabetes mellitus were included. Thirty patients received weekly intralesional injections of verapamil 10mg plus dexamethasone 4 mg for 6 weeks, weekly verapamil 10 mg plus dexamethasone 4 mg via transdermal electromotive were administered for 30 patients for 6 weeks. All patients were examined one and three months after the treatment. Response has been defined as regression in plaque-size, reduction in penile curvature, pain, IIEF and improved vaginal penetration.
Results: Transdermal electromotive approach and intralesional injection groups were assigned as group 1and 2, respectively. Although patients' symptoms such as plaque size, curvature, vaginal penetration and IIEF improved, the differences between the groups were not significant in plaque size one month ($p<0.351$) and three months after the treatment ($p< 0.169$). There was no significant difference in penile curvature of the groups one month ($p<0.601$) and three months after the treatment ($p< 0.389$). However, in the transdermal electromotive group, pain decreased significantly in one month ($p<0.001$) and three months ($p<0.0003$) after the treatment.
Conclusions: The results of this study indicate a significant decrease of pain between the groups; the transdermal electromotive administration of verapamil and dexamethasone is clinically safe and appears to be an effective treatment in patients with peyronie's disease but it is more expensive than intralesional injection.