Title:
Efficacy of intravenous Belgian Depo-medrol compared with methylprednisolone on peripheral areas and posterior thigh pain intensity in patients with unilateral trochanteric bursitis referred to Shariati Hospital clinic in Isfahan

Abstract:
Background: When other therapeutic interventions for trochartritic bursitis fail, corticosteroid injections into the suppository and local anesthetics are performed, which greatly reduces the pain and leads to healing. Therefore, study of the effectiveness of different types of corticosteroids in the treatment of patients with trochanteric bursitis is very important. Purpose: The aim of this study was to compare the effect of injection of Belgian depo-medrol in comparison with methylprednisolone on the pain intensity in patients with the unilateral trochanteric bursitis referred to Shariati Hospital clinic in Isfahan. Methods: This is a clinical trial conducted at Shariati Hospital in Isfahan. The statistical population devided in two groups of 55 patients with unilateral trochanteric bursitis syndrome (a group was injected with the Belgian depo-medrol and the other group with injection of methylprednisolone). All subjects were examined based on the criteria for entering the study. Before the injection of corticosteroids and 30 days after injection, a numerical scale of the pain assessment questionnaire was completed by the patients. Data were analyzed by SPSS software version 22. The statistical tests used were Chi-square, paired t-test, independent t-test and logistic regression. The significance level was considered $p < 0.05$. Results: The mean age in the depo-medrol group is 54.23 and in the methylprednisolone group 49.27 years. In the depo-medrol group, 94.5% and in the methylprednisolone group 89.1% of subjects are women. The mean duration of the disease in the depo-medrol group (3.86 months) was significantly higher than the mean of methylprednisolone group (2.4 months). The duration of back pain in the depo-medrol group (2.29 years) from the methylprednisolone group (1.27 years) is higher, but is non-significant. In the depo-medrol group, the mean pain intensity before intervention was 8.91 and then decreased to 3.07%, which was a significant decrease, but in the methylprednisolone group, the mean pain intensity before the intervention was 9.53 and after intervention was 7.38 decreased, and this decrease was also significant. In the depo-medrol group, which had a mean pain relief of 5.84 units compared to pre-consumption, it was statistically significant in reducing the methylprednisolone group, which was 2.15. Although both drugs were effective in controlling pain in both men and women, decreasing the pain was observed in the depo-medrol group more than the methylprednisolone group. Conclusion: Both interventions (depo-medrol injection and methylprednisolone injection) alone have a significant effect on pain relief, but intervention with depo-medrol is more effective than medication with methylprednisolone. Further studies with higher statistical society in this field seems necessary.

Keywords:
Trochanteric Bursitis Pain Syndrome (TBPS), Bursa, Back pain, Intravenous Corticosteroid