The comparison of pain intensity and rate of bleeding in intramuscular injection in Dorsogluteal and Ventrogluteal area

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Abstract

Background & Objective: We have two areas in gluteal region for intramuscular injection, Ventrogluteal and Dorsogluteal. This study was done to compare pain intensity and bleeding rate after injection in Ventrogluteal and Dorsogluteal area.

Materials & Methods: This clinical trial study was done on 67 males in 5th Azar hospital in Gorgan north of Iran. Patients had 2 injections during 24 hours. For every patient one injection was done in Dorsogluteal area and the second injection was done in Ventrogluteal area. For every patients the pain intensity and rate of bleeding for every injections recorded. Data analyzed by SPSS-11.5 software and Kolmogorov-Smirnov and Wilcoxon tests.

Results: In Dorsogluteal area 83.5% of patients had a low and medium pain, where as in Ventrogluteal area 88% of patients had a low and medium pain and 9% of them had not any pain. The Mean±SD of pain intensity in Dorsogluteal area was 50.79±1.682 and in Ventrogluteal was 40.79±1.878. The Mean±SD of bleeding in Dorsogluteal and Ventrogluteal areas were 0.73±0.102 and 0.19±0.047 respectively. There were significant differences in pain intensity and bleeding between two groups (P<0.05).

Conclusion: We concluded that the injection in Ventrogluteal area has a less pain and bleeding rate in comparison with Dorsogluteal area.

Key Words: Intramuscular, Injection, Dorsogluteal, Ventrogluteal, Pain intensity, Bleeding