

Comparison of electrotherapy of hemorrhoids and Ferguson hemorrhoidectomy in a randomized prospective study

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Abstract

Background

Ferguson hemorrhoidectomy has been shown to be associated with significant amount of post-operative (post op) pain and complications. However, electrotherapy in which hemorrhoidal tissue is not excised might not be associated with severe complications.

Objective

Our aim was to compare the results of Ferguson hemorrhoidectomy with electrotherapy methods using 16 and 30 mA (milliamperes) direct current (DC).

Methods

Four hundred and eight patients with symptomatic hemorrhoids, grades 1, 2 and 3, were randomly assigned into 3 groups. Group A (136 patients) underwent Ferguson hemorrhoidectomy, group B₁ (136 patients) and group B₂ (136 patients) were subjected

to electrotherapy using 16 and 30 mA, respectively. The groups were compared in terms of duration of procedures, duration of hospital stay, post op pain severity and post op complications including recurrence, infection and non-healing ulcers.

Results

All patients in group A had severe pain for 7–14 days of post op. However, in group B₁, 88(65%) patients had mild pain during the treatment and 1st post op day; 28(21%) of them could not tolerate the operation; 20(15%) of them had mild pain and 10(7.5%) of them had moderate pain up to day 7. In group B₂, 47(35%) of patients had sever pain for 6 h and 20(15%) of them experienced mild pain for 2–7 days post op. The one day hospital stay in group A and group B₂ were 82 and 97%, respectively, while patients in group B₁ were treated as out patients. Mean procedure time for one hemorrhoidectomy in group A was 23 min, in electrotherapy using 16 and 30 mA was 9.7 and 6.1 min, respectively. The overall success rate with the first application in group B₁ was 57% and in group B₂ was 93%.

Conclusion

Electrotherapy method using 30 mA DC could significantly decrease post op pain, operation time and hospital stay. This method had good success rate and very low post op complications compared to Ferguson hemorrhoidectomy and using 16 mA method. Therefore, due to its effectiveness, less pain, rapidity and safeness, we recommend it.

Keywords: Electrotherapy; Hemorrhoid; Ferguson hemorrhoidectomy; Post op pain

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Table 1.


Demographic and clinical characteristics of the patients in the 3 groups

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Table 2.

Frequency of pain severity at days 1, 7 and 14 after the procedures in groups A, B₁ and B₂

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