

EFFECT OF BETAMETASONE INJECTION ON THE SPONTANEOUS REGRESSION OF INTERVERTEBRAL DISC HERNIATION

Introduction

Local inflammatory response and the body's autoimmune response at the intervertebral disc hernia site play a key role in its decrease. The use of a betamethasone epidural leads can decrease and in some cases, probably, a complete cessation of autoresorption processes. It also increases the chances of transforming this into a chronic ailment as a result of continuous alternation between suppression and resumption of the inflammatory and autoimmune processes. This may in turn lead to the need for immediate surgical intervention, with the alternative being disability.

Purpose/Aim

The aim of our study is to determine the role of betamethasone as opposed to placebo in decreasing intervertebral disc hernias.

Materials and Methods

82 patients aged 20 - 45 years participated in the study. All patients were diagnosed through an MRI as having intervertebral disc hernias with sizes varying from 8mm to 12mm (anteroposterior size) at the start of the study.

The patients did not have severe somatic illnesses requiring constant medication. Patients were divided into two groups - Group A and Group B.

Group A

Sex - 28 male and 14 female.

Age - Average age 32.6 years.

IDH size - Average intervertebral disc hernia size 9.2 mm.

Group B

Sex - 25 male and 15 female.

Age - Average age 34.2 years.

IDH size - Average intervertebral disc hernia size 9.3 mm.

All patients in Group A received a single epidural with bethamethasone sodium. Patients in Group B were placed on placebo.

Results

Group A - Two females, from Group A had to leave the study due to the fact that they developed gastropathy.

Group B - 3 patients left the study (2 males and 1 female). This was due to the development of severe pain requiring constant medication.

At the end of 28 days, all patients received a second MRI. Results showed a decrease in the size of the intervertebral hernias.

Group A - average decrease from 9.2 mm to 9.00 mm (0.2mm decrease). ($p \leq 0,05$)

Group B - average decrease from 9.3 mm to 7.0 mm (2.3 mm decrease). ($p \leq 0,05$)

At the beginning of the study, the VAS scale showed that Group A recorded a more rapid decrease in pain in comparison to Group B. By the end of the study both groups recorded similar responses to pain stimulation.

Conclusions

Initial findings already show that the role of betamethasone must be reconsidered in the treatment of certain types of intervertebral hernias, in particular, those that are subject to relatively fast resorption. Such hernias can be supported with alternative pain medication that does not include the use of steroids which only suppress the inflammatory process, which seems to be a requisite for effective resorption and therefore, recovery.

Keywords

Low back pain, disc herniation

References

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