

SERUM PROTEINS IN HYSTERECTOMIES

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SUMMARY

Levels of acute phase proteins such as C-reactive protein (CRP), α 1- antithrypsin (α 1 AT) and myoglobin were compared in 2 groups of patients to whom vaginal or abdominal hysterectomy has been performed.

It is concluded that vaginal hysterectomy is less traumatic than abdominal hysterectomy.

Key Words : C-Reactive protein, α 1- antithrypsin, Myoglobine, Hysterectomy.

INTRODUCTION

A surgical intervention has to ensure a favourable outcome to the patients which means a fast adaptation to normal life. Recently many investigations and studies have been performed for this purpose.

Acute phase proteins are the quantitative indicators of tissue damage after the operation, especially in cardiac surgery (1, 2). Besides, it is presumed that acute phase proteins could be indicator of tissue damage after gynecological operations.

In this study, traumatic effect of vaginal or abdominal hysterectomy are compared with respect to acute phase protein levels.

MATERIALS AND METHODS

This study includes 30 patients to whom hysterectomy (15 vaginal, 15 abdominal) and bilateral tubectomy were performed. Mean ages are 45,6 and 42,7 respectively in 2 groups. They were all operated for causes other than malignancies.

Blood specimens from each patient were obtained prior to operation and on the 2nd, 4th, 6th days at 08.00 a.m.

postoperatively. CRP, α 1 AT and myoglobin levels were determined by radioimmunoassay method.

RESULTS

Acute phase protein levels in 2 groups at mentioned days are shown graphically.

CRP, α 1 AT and myoglobin levels are indicated in figures 1, 2, and 3 successively.

DISCUSSION

There are many studies indicating an increase in acute phase proteins as a biologic response to physical trauma. (3) In this study we investigated the levels of acute phase proteins corresponding to pre - and postoperative days and saw that CRP and α 1 AT made a peak at the 2nd day and myoglobin reached the highest level at the 4th day after the operations in abdominal hysterectomy group. In this group at the sixth day all proteins decreased almost to the same levels of those in vaginal hysterectomy group. When the highest levels of these acute phase proteins are compared with each other, it was seen that both the values of CRP and myoglobin levels were two times higher in the abdominal hysterectomy group. However α 1 AT levels showed a slight difference between two groups. Therefore it can be said that CRP and myoglobin are more valuable indicators of trauma with respect to α 1 AT.

In this study a difference between levels of acute phase proteins following vaginal hysterectomy and abdominal hysterectomy is seen in concordance with previous reports and it is concluded that the vaginal hysterectomy causes less traumatic effects (4).

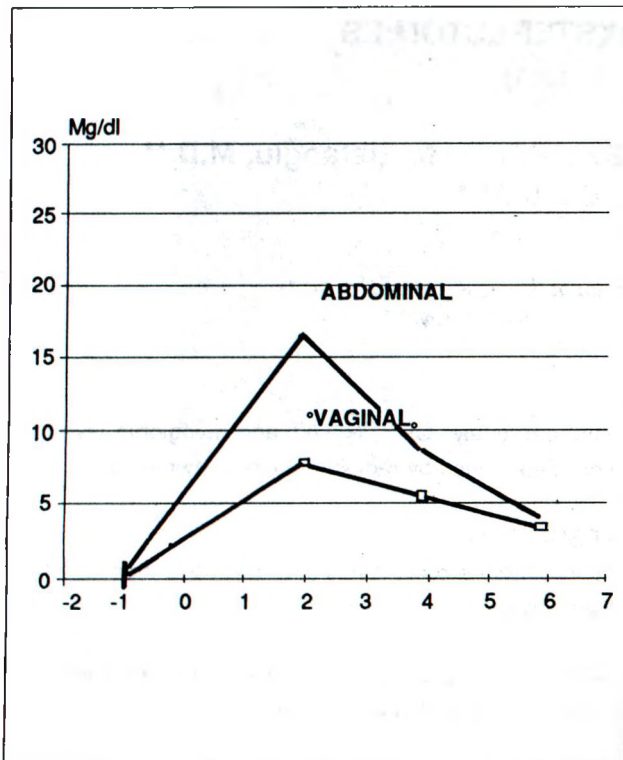


Fig. 1. CRP curves in vaginal abdominal hysterectomies.

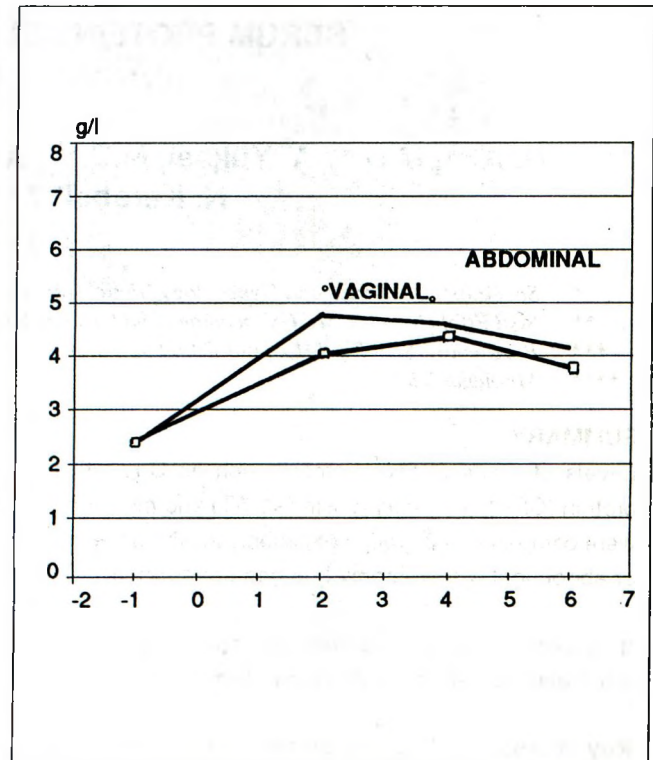
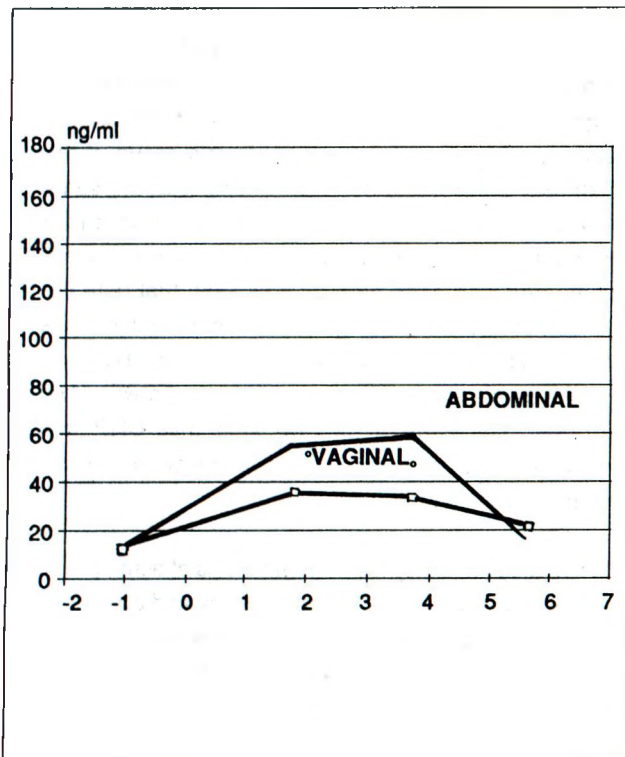
Fig. 2. α_1 AT curves in vaginal abdominal hysterectomies

Fig. 3. Myoglobine curves in vaginal abdominal hysterectomies

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