CA 125 AND VAS PAIN SCORE MODIFICATIONS FOLLOWING GNRH-ANALOG ADMINISTRATION AS EX ADIUVANTIBUS CRITERIA TO DIAGNOSE ENDOMETRIOSIS AS CAUSE OF CHRONIC PELVIC PAIN.
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Background and aims: Endometriosis is the leading single cause of chronic pelvic pain (CPP). To date, the gold standard to diagnose this condition is histologic confirmation of lesions obtained by surgery. However, a noninvasive and cheaper tool for early diagnosis is strongly needed. The aim of this study is to assess the diagnostic accuracy for the detection endometriosis of serum CA 125 and VAS pain score modifications following one dose of GnRH-analog (GnRH-a).

Methods: seventy-one women scheduled for a diagnostic laparoscopy for CPP were enrolled. Serum CA125 and VAS pain score were determined for each patient at the early follicular phases. Prior to surgery, patients received one vial of leuprolide acetate depot (LAD). One month following LAD administration, serum CA125 and VAS pain score were assessed again. Following laparoscopy and histologic examination, cases were sub-grouped into group A1 (subjects with endometriosis) and group A2 (subjects without endometriosis).

Results: Plasma CA125 levels and VAS pain score during the early follicular phase were similar in groups A1 and A2. One month after GnRH-a administration, however, a significant reduction (delta) in plasma CA-125 levels and VAS pain score was observed only in group A1. AUCs for delta CA125, VAS score and for the combination of these two delta following GnRH-a, were 0.95, 0.91 and 0.98 respectively.

Conclusions: The assessment of serum CA 125 and VAS pain score following one dose of GnRH-a demonstrates good accuracy to diagnose endometriosis in patients with CPP. The response to GnRH-a administration in women with CPP could therefore be employed as an ex adiuvantibus diagnostic criteria for endometriosis.