The diagnostic value of serum CA125 in the diagnosis of endometriosis

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INTRODUCTION

Endometriosis is a gynaecologic condition characterised by the presence of endometrial tissue outside the uterine cavity.

The gold standard diagnostic test is visualization at surgery and histological confirmation.

Non-invasive tests for endometriosis could reduce time to diagnosis, offer early treatment options, and reduce disease progression.

CA 125 is raised in endometriosis through stimulation of coelomic epithelia including the endometrium, fallopian tube, ovary, and peritoneum.

OBJECTIVE

To determine the diagnostic value of serum Cancer Antigen 125 (CA125) in the diagnosis of endometriosis in women presenting with pelvic pain.

METHODS

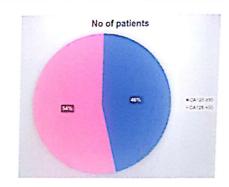
Retrospective study of all patients with pelvic pain suspected to have endometriosis who underwent surgical treatment between August 2015 and August 2016.

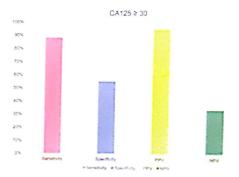
All patients had a pre-operative blood test for CA125.

We evaluated the diagnostic accuracy of serum CA125 and endometriosis confirmed at laparoscopy.

RESULTS

- Thirty-nine women were included.
- Eighteen patients (46.2%) had CA125 ≥30u/mL and 21 (53.8%) had CA125 <30u/mL.
- The mean CA125 was 56.9 + 84.1u/mL. The sensitivity, specificity, positive and negative predictive value of CA 125 ≥30u/ml were 88% (95% CI 47.4-99.7%), 55% (95% CI 36.0-72.7%), 94.4% (95% CI 72.6-99.1%) and 33.3% (95% CI 23.8-44.4%) respectively.
- The positive likelihood ratio for the presence of endometriosis at laparoscopy with a CA 125 ≥30u/ml was 4.4 (95% CI 0.68-28.2).





CONCLUSION

Serum CA125 is an important predictor for patients with endometriosis and should be taken into consideration when planning initial investigations of women with possible endometriosis.

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