

The comparison of serum Follicle-Stimulating Hormone (FSH) and vaginal pH for the diagnosis of menopause

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Abstract

Introduction: Because of improvements in the measurement methods of FSH levels in serum, there is less interest in evaluating vaginal pH for the diagnosis of menopause nowadays. The traditional test to diagnose menopause has been FSH, so far. In recent studies it has been shown that diagnosis of menopause by testing for vaginal pH is a simple, non-invasive and inexpensive method. This study intended to compare diagnostic value of vaginal pH and serum FSH in the diagnosis of menopause.

Materials & Methods: This article is a descriptive cross-sectional study taking place from June to July 2005. 120 menopausal women, aged 31 to 95 years that were being referred to a menopausal clinic in Qaem Hospital during the study, were chosen by a target-based nonrandom sampling technique for the study. A questionnaire was used for collecting data from the patients. In addition, pH test strips were used for vaginal pH measurements and the patients' serum FSH were evaluated in a definite laboratory and their clinical signs and symptoms were recorded. The data was analyzed by SPSS software and the statistical significant of the results were tested by χ^2 in comparison with the kappa coefficient of agreement. $P \leq 0.05$ was considered as the significance level of the study.

Results: According to the gathered data in the study, the average vaginal pH in the patients, in the absence of vaginal infections, was 5.33 ± 0.53 (with a minimum of 4.1 and a maximum of 5). With attention to the cut of point of 4.5 for vaginal pH and the baseline FSH >20 mIU/ml that characterizes menopause, the sensitivity of pH-meter in diagnosing menopause was determined to be 97%. The mean average and the standard deviation of FSH levels in this study was 80.79 ± 6.42 .

Conclusion: Vaginal pH sensitivity in the diagnosis of menopause is similar to serum FSH and could be used as a suitable alternative.

Key Words: Menopause, Follicle Stimulating Hormone, Vaginal pH, Diagnosis, Sensitivity

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