

CORRELATION BETWEEN BIOCHEMICAL, ULTRASONOGRAPHIC AND DEMOGRAPHIC PARAMETERS WITH OVARIAN RESPONSE TO IVF/ICSI TREATMENTS IN MEXICAN WOMEN

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Abstract Body

Correlation between biochemical, ultrasonographic and demographic parameters with ovarian response to IVF/ICSI treatments in Mexican women
Background: Ovarian response with a conventional ovarian stimulation protocol is a crucial step in IVF/ICSI treatments. This ovarian response encompasses a wide range of outcomes, at the extremes leading to either excessive responses with the risk of life-threatening conditions, i.e. ovarian hyperstimulation syndrome (OHSS) or poor ovarian response (POR) with low results. This study is aimed to integrate biochemical, ultrasonographic and demographic parameters in a mathematical formula able to predict the ovarian response to stimulation for IVF/ICSI in gonadotrophin-releasing hormone (GnRH) antagonist protocols. Materials and methods: The retrospective analysis included a total of 147 patients, who underwent an ovarian stimulation protocol combining recombinant FSH and gonadotrophin-releasing hormone antagonist. All the parameters were correlated with the Spearman Rho and Pearson's correlation coefficient. Once the data were normalised, we performed the multiple linear regression model, verifying the results with the progressive discriminant analysis. Results: The database was classified according to the correlation with the number of oocytes retrieved; the progressive discriminant analysis resulted in the following equation: $\text{oocytes retrieved} = 2.312 - 0.130(\text{FSH}) + 0.562(\text{AFC})$ Conclusions: The incorporation of 2 ovarian reserve parameters into a regression equation allow knowing the number of retrieved oocytes in each patient with an 80.5% sensitivity and 55.4% specificity.

Abstract image

