Invited critical review

AMH: An ovarian reserve biomarker in assisted reproduction ☆

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ABSTRACT

Ovarian reserve tests provide knowledge of a possible response to controlled ovarian hyperstimulation in patients undergoing assisted reproduction treatment, allowing management and alteration of treatment protocol with the appropriate dose of gonadotrophin. Several parameters have been used as predictors of ovarian response. The basal FSH serum level on the third day of the menstrual cycle seemed to be the best predictor, but with significant intraindividual variability from one cycle to another. Thus, the anti-Müllerian hormone (AMH) emerges as a new ovarian test marker. AMH is produced exclusively in the gonads, by the granulosa cells, and plays an important role in folliculogenesis, acting on the modulation of follicular recruitment in the granulosa cells in order to limit the number of recruited oocytes and to regulate the number of growing follicles and their selection for ovulation. It has been suggested that AMH is strongly associated with oocyte yield after ovarian stimulation and could therefore be capable of predicting the ovarian response and the quality of oocytes and embryos. In this review, we discuss the role of AMH in assisted reproduction outcomes.

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1. Introduction

1.1. Objective

To review the role of the anti-Müllerian hormone in assisted reproduction outcomes.

2. Background

Conjugal infertility is characterized by the absence of spontaneous pregnancy after the minimum period of twelve months, with the practice of regular and unprotected intercourse [1].