

Title

THE IMPACT OF THYROID AUTOANTIBODIES POSITIVITY ON IN VITRO FERTILIZATION OUTCOME: A SYSTEMATIC REVIEW

Presenting Author

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Abstract

Introduction

It is well established that thyroid dysfunction, mainly caused by auto-immune disorders, could jeopardize fecundity. However, there are insufficient data regarding the direct impact of thyroid auto-antibodies (TAA) on IVF outcome, especially regarding TAA-positive euthyroid women. The aim of this study is to provide robust data regarding the direct impact of TAA on IVF outcome.

Materials and Methods

An Embase, PubMed/Medline and Cochrane Central Database search was performed on 1 December 2018, from 2006 until that date. The search was limited to full-length manuscripts published in English in peer-reviewed journals. The population of the study included euthyroid women undergoing IVF. The primary outcome measure was live birth rate and/or ongoing pregnancy (LB/OP). Secondary outcome measures were clinical pregnancy rate (CP), biochemical pregnancy rate (BP) and miscarriage rate.

Results

From the 598 articles yielded in the search only 14 relevant articles fulfilled the inclusion criteria and were included. Three studies report on BP rate. No statistically significant difference was observed. Fourteen studies reported on CP rates. Only three studies observed a statistically significant lower CP rate in the TAA positive group. Eleven studies reported on miscarriage rate. Only one study reported a higher miscarriage rate in the TAA positive group, while the remaining ten demonstrated no difference. Ten studies reported results on LB/OP rate. No study reported a statistically significant difference in LB/OP rates.

Discussion and Conclusions

Following evaluation of the evidence published from 2006 to 2018, TAA presence in euthyroid women appears not be correlated with poorer outcomes following IVF/ICSI.