Reviewer's report

Title: A Systematic Review of the Safety and Effectiveness of In Vitro Fertilization: the impact of procedural factors

Version: 3

Date: 11 August 2014

Reviewer: Wellington Martins

Reviewer's report:

This overview addresses an important issue, it is well reasoned, and the standard of writing is acceptable. However, it was not well designed and it does not represent the field as a whole. Authors must provide clear eligibility criteria for the studies. I also recommend to use a recently published Cochrane overview as a template (1).

- Major Compulsory Revisions

Authors must provide clear eligibility criteria for the studies; as currently written, this is should be classified as a narrative review.

In order to examine the efficacy of interventions (as frozen vs. fresh, multiple embryo transfer vs. single embryo transfer), authors should consider including only systematic reviews of RCTs, as the evidence is normally of higher quality and would be easier to interpret. However, authors should include all systematic reviews of RCTs examining interventions. Currently, several interventions with published systematic reviews were not included in this overview: e.g. time-lapse embryo imaging (2), ultrasound guidance (3), ultrasound for monitoring controlled ovarian stimulation (4), cabergoline for the prevention of OHSS (5), melatonin supplementation during controlled ovarian stimulation (6), IMSI (7), replacing FSH by low-dose hCG in the late follicular phase (8), mild stimulation using oral agents (9), endometrial injury (10), assisted hatching (11), etc.

In order to examine the safety of the interventions, authors should consider including systematic reviews of observational studies, as the evidence from RCT is generally not precise enough to allow meaningful conclusions. However, the evidence from observational studies is at a higher risk of bias, reducing the quality of the evidence.

Authors should use GRADE workgroup recommendations to examine the quality of the evidence (http://www.gradeworkinggroup.org/).

References


- Minor Essential Revisions and Discretionary Revisions
  None

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable
**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests