Reviewer’s report

Title: Tubal Ligation and Endometrial Cancer Risk: A Global Systematic Review and Meta-Analysis

Version: 1 Date: 19 Nov 2018

Reviewer: Shailesh Advani

Reviewer's report:

Abstract:
Needs scientific editing throughout.

a) Give brief idea of previous results in abstract. A systematic review and meta-analysis was performed…

b) Results: Summarize the entire search strategy. What was the Cohen-s Kappa for interrater reliability? Why was random effects model not used? What were I2 values of heterogeneity?

c) Why was first 8 studies pooled than 10? How many studies were used to measure adjusted ORs? What factors did these studies adjust for?

Background:

a) Lines 1 and 2: are these statistics for all cancers or Endometrial cancer?

b) In accordance with the report, endometrial cancer is the most frequent gynecological malignancy and the sixth most frequent malignancy among women in the world and its incidence is increasing—Seems contraindicating: When you state that it is most frequent gynecology malignancy, how can it be 6th?

c) Combine paragraphs 1 and 2

d) With no metastatic……u mean no metastases?

e) Primary prevention of this disease should be a priority, since part of the new cancer cases can be prevented- Please expand. This does not give clear idea of the message. Plus provide references.

f) Lines 71-73: Need clarification

g) There seems to be no background on TL and Endometrial cancer, Add these

h) Statistics of TL: do these match with rates of Endometrial Cancer

i) Need scientific editing throughout

Methods and Results:

a) What was the start date of search?

b) Who did the search? Please elaborate.

c) Was an interrater reliability test done? Describe in detail

d) These data were entered into the Excel software for preparation and cleaning and finally they entered into the Stata software for meta-analysis.--- They entered?

e) Describe in more detail the demographic characteristics of studies included. Add a paragraph

f) Line 151: Report I2

g) Line 152: Give refs for 2 studies
h) Line 152-153: Provide reference and basis for same
i) Line 156: provide I2
j) How many studies reported adjusted odds ratio? References needed
k) Add I2 everywhere with ORs and 95% CI
l) In methods: describe steps involved in meta-regression. How was bias assessed using meta-regression? Outputs needed in form of tables if possible
m) Show NewCastle Ottawa scale output as figures
n) In tables: add country from which study was conducted

Discussion:

a) The results of the current systematic review and meta-analysis suggest that tubal ligation is related with significantly reduced risk of endometrial cancer by approximately 14-42%—Consider rephrasing, as this was based on 3 different meta-analysis, and one effect size is important. Please consider which should the readers follow
b) In results: especially when including adjusted analysis, describe what factors were your study results adjusted for
c) Line 221: How were these year periods defined? Based on??
d) Meta-regression: Why not try and assess if age was a main source by doing subgroup analysis based on age group inclusion

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review
Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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