THE EFFICACY OF SECOND CURETTAGE IN THE TREATMENT OF LOW-RISK GESTATIONAL TROPHOBLASTIC NEOPLASIA: A SYSTEMATIC REVIEW AND META-ANALYSIS

Sarah Jill Mah, Melissa Lavecchia, Alida Pokoradi, Clare J Reade, Lua R Eriksson. Obstetrics and Gynecology, MMaster University and Juravinski Cancer Centre, Hamilton, ON, Canada

Introduction/Background

Patients with low-risk gestational trophoblastic neoplasia (GTN) are almost universally cured with chemotherapy, but second uterine curettage has been explored as an alternative to avoid chemotherapy-related toxicities. We systematically reviewed intervention studies to determine whether second curettage in patients with low-risk GTN affects: 1) the proportion of patients requiring chemotherapy; 2) the number of chemotherapy cycles; and 3) the need for multi-agent chemotherapy.

Methodology

A literature search was performed including the Cochrane Central Register of Controlled Trials, MEDLINE, EMBASE, and Web of Science. Two authors screened titles, abstracts, and full texts and abstracted data. Risk of bias was assessed for each outcome. Data were pooled using a random-effects model and assessed for heterogeneity. Quality of evidence was assigned using GRADE.

Results

Six studies met inclusion criteria; 2 randomized studies (RCT) and 4 cohort studies with control arm (CS). Mean difference in number of chemotherapy cycles was 2.04 fewer in patients who underwent second curettage (95% CI -5.00 to 0.91) based on two pooled RCTs (N=138). Those who underwent second curettage had RR=0.60 (95% CI 0.31 to 1.18) for requiring chemotherapy based on 4 pooled CS (N=1105), and RR=1.17 (95% CI 0.76 to 1.80) for multi-agent chemotherapy based on two pooled CS (N=900). The certainty of evidence is very low due to risk of bias for potential confounding, selection bias, missing data, and inconsistency of the results.

Conclusion

In patients with low-risk GTN, second curettage may increase the proportion cured without chemotherapy, with a trend toward decreasing the number of chemotherapy cycles required, without increasing the risk of requiring alternative chemotherapy. Prospective randomized trials including measurement of safety and fertility data are warranted as the quality of evidence in this review was low.