

The effect of hyoscine-N-butylbromide on pain perception during and after hysterosalpingography in infertile women: A systematic review and meta-analysis of randomized controlled trials

ABSTRACT

This paper reports a systematic review and meta-analysis of the effectiveness of hyoscine-Nbutylbromide(HBB) administration in hysterosalpingography (HSG). Four electronic databases were searched for randomised controlled trials (RCTs) that compared HBB versus placebo or no intervention in infertile women undergoing HSG. Pain during and after HSG and different adverse events including nausea, vomiting, and dizziness were evaluated. Three RCTs with 335 patients were included. The analysis showed HBB was significantly effective in reducing pain during and after HSG (MD $\frac{1}{4}$ -0.76 mm, 95% CI $[-1.35, -0.17]$, $p=0.01$) and (MD $\frac{1}{4}$ -0.81 mm, 95% CI $[-1.07, -0.56]$, $p<0.001$), respectively. There were no significant differences in adverse events between HBB and control groups. The methodological evidence quality was high as evaluated by GRADEpro. In conclusion, this review provides good evidence that prior administration of HBB is effective in reducing induced pain during and after HSG with tolerable side effects.