IS CAESAREAN SECTION PROTECTIVE AGAINST FECAL INCONTINENCE IN WOMEN WITH OBSTETRIC ANAL SPHINCTER INJURY? A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background

The risk of worsening anal incontinence (AI) after Obstetric Anal Sphincter Injury (OASI) is an important consideration for women choosing mode of delivery in subsequent pregnancies. Evidence to support Caesarean Section (CS) over planned Vaginal Birth (VB) is limited.

Aims/Methods

A systematic review of the impact of subsequent birth on AI in women after OASI was performed with the protocol prospectively registered on PROSPERO. Five databases were searched and all data double-extracted by blinded independent reviewers. Analyses were performed in Revman 5.4.

Results

2418 articles (excluding 1292 duplicates) were identified. 85 studies met inclusion criteria. 47 studies reported recurrence of OASI in women undergoing vaginal birth. Index OASI rate ranged from 0.6-16% and recurrence rate from 0.89-25%.

One RCT and 24 non-RCTs were meta-analysed. Studies were significantly confounded by higher incidence of AI in women choosing CS compared with VB.

There was no evidence of a difference between VB or CS in the overall rate of anal incontinence after subsequent delivery (OR 1.52 CI 0.93-2.50, 9 studies). There was no evidence of a difference between VB or CS in deterioration of anal incontinence in the short term (<5y) after subsequent delivery (OR 1.10 CI 0.66-2.14, 6 studies). VB may cause deterioration of AI symptoms in the long term (>5y) compared to CS (OR 0.60, CI 0.45-0.80, 2 studies). AI may worsen post-subsequent delivery in women with OASI regardless of delivery mode (OR 0.61 CI 0.38-0.98, 13 studies).

Conclusion

Mode of birth does not impact short-term rates of AI in women delivering after OASI. In the long term, CS may reduce deterioration of AI symptoms. The data is limited by high risk of bias (lack of randomisation/blinding), poor reporting of long-term outcome data and heterogeneity due to different approaches to deciding mode of delivery. Further research is needed to identify women who will benefit from CS to prevent deterioration in AI.