


Review: data are lacking on the effect of bed rest in women with singleton pregnancies who are at high risk of preterm birth

Sosa C, Althabe F, Belizán J, *et al*. Bed rest in singleton pregnancies for preventing preterm birth. *Cochrane Database Syst Rev* 2004;(1):CD003581.


Clinical impact ratings GP/FP/Obstetrics ★★★★★☆ Obstetrics ★★★★★☆

Q In women with a singleton pregnancy who are at high risk of spontaneous preterm birth, what is the effect of bed rest in hospital or at home for preventing preterm birth?


METHODS



Data sources: Cochrane Pregnancy and Childbirth Group trials register, Medline, EMBASE/Excerpta Medica, LILACS, and POPLINE (all searched July 2003); the Cochrane Library (Issue 2, 2003); key journals; bibliographies of relevant papers; and conference proceedings.



Study selection and assessment: randomised controlled trials (RCTs) and quasi RCTs that assessed clinical outcomes in women at high risk of spontaneous preterm birth who were prescribed bed rest in hospital or at home for preventing preterm birth, and their babies. Studies of bed rest in women with preterm premature rupture of membranes or multiple pregnancies were excluded. Studies were assessed for allocation concealment, blinding, and completeness of follow up.



Outcomes: preterm birth (<37 wks), perinatal mortality, low birth weight (<2500 g), and neonatal intensive care.

for rate of preterm birth (<37 wk) (table). No other results were available.

CONCLUSION

In women with a singleton pregnancy who are at high risk of spontaneous preterm birth, data are lacking to support or refute the effect of bed rest at hospital or at home to prevent preterm birth.

Commentary

The incidence of preterm birth has stayed constant over the years despite all the advances in medical and social care. A variety of therapies such as bed rest in the lateral position, antibiotics, and uterine tocolytics are often recommended to prevent preterm birth. Bed rest at home may be a more economical and socially acceptable intervention than bed rest in a hospital. But both may have side effects (eg, possible increase in venous thrombosis or muscle atrophy) or both may cause stress for the women and her family.¹ Good methodological randomised trials are lacking that address the safety and efficacy of bed rest at home or at hospital to prevent preterm birth. The Cochrane review by Sosa *et al* identified 1 study that addressed the intervention. Although this was an RCT, it is important to know that it was not randomised to assess the effect of bed rest when the reader interpreted the results.

From this review by Sosa *et al*, we can conclude that, currently, good evidence is not available to encourage or to discourage bed rest at home or in hospital to mothers with singleton pregnancies who are at risk to deliver before 37 weeks. This intervention should be prescribed with caution until effective evidence becomes available.

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1 Maloni JA, Brezinski-Tomasi JE, Johnson LA. Antepartum bed rest: effect upon the family. *J Obstet Gynecol Neonatal Nurs* 2001;**30**:165–73.

MAIN RESULTS

1 RCT met the selection criteria. The study included a placebo group and a drug group among its comparisons. The placebo (n = 412) and no intervention (n = 422) groups were combined and compared with bed rest (n = 432) for this review. Women who were prescribed bed rest did not differ from those who received placebo or no intervention

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Bed rest v placebo or no intervention in women with singleton pregnancies at high risk of spontaneous preterm birth*

Outcome	Bed rest	Placebo or no intervention	RRR (95% CI)	NNT
Preterm birth (<37 wks)	7.9%	8.5%	8% (-37 to 38)	Not significant

*Abbreviations defined in glossary; RRR, NNT, and CI calculated from data in article.