Bed rest in singleton pregnancies for preventing preterm birth (Review)

Sosa C, Althabe F, Belizán J, Bergel E

This is a reprint of a Cochrane review, prepared and maintained by The Cochrane Collaboration and published in *The Cochrane Library* 2007, Issue 4

http://www.thecochranelibrary.com

TABLE OF CONTENTS

ABSTRACT 1
PLAIN LANGUAGE SUMMARY 2
BACKGROUND 2
OBJECTIVES 2
CRITERIA FOR CONSIDERING STUDIES FOR THIS REVIEW 2
SEARCH METHODS FOR IDENTIFICATION OF STUDIES 3
METHODS OF THE REVIEW 4
DESCRIPTION OF STUDIES 4
METHODOLOGICAL QUALITY 4
RESULTS 5
DISCUSSION 5
AUTHORS' CONCLUSIONS 5
POTENTIAL CONFLICT OF INTEREST 5
ACKNOWLEDGEMENTS 5
SOURCES OF SUPPORT 5
REFERENCES 5
TABLES 7
Characteristics of included studies 7
Characteristics of excluded studies 7
ANALYSES 7
Comparison 01. Bed rest versus no intervention 7
INDEX TERMS 7
COVER SHEET 8
GRAPHS AND OTHER TABLES 9
Analysis 01.01. Comparison 01 Bed rest versus no intervention, Outcome 01 Preterm birth 9

Bed rest in singleton pregnancies for preventing preterm birth (Review)

Sosa C, Althabe F, Belizán J, Bergel E

This record should be cited as:
Sosa C, Althabe F, Belizán J, Bergel E. Bed rest in singleton pregnancies for preventing preterm birth. *Cochrane Database of Systematic Reviews* 2004, Issue 1. Art. No.: CD003581. DOI: 10.1002/14651858.CD003581.pub2.

This version first published online: 26 January 2004 in Issue 1, 2004.
Date of most recent substantive amendment: 01 October 2003

ABSTRACT

Background
Bed rest in hospital or at home is widely recommended for the prevention of preterm birth. This advice is based on the observation that hard work and hard physical activity during pregnancy could be associated with preterm birth and with the idea that bed rest could reduce uterine activity. However, bed rest may have some adverse effects on other outcomes.

Objectives
To evaluate the effect of prescription of bed rest in hospital or at home for preventing preterm birth in pregnant women at high risk of preterm birth.

Search strategy
We searched the Cochrane Pregnancy and Childbirth Group trials register (July 2003), the Cochrane Central Register of Controlled Trials (The Cochrane Library, Issue 2, 2003), MEDLINE (July 2003), LILACS (July 2003), EMBASE (July 2003), POPLINE (July 2003) and bibliographies of relevant papers.

Selection criteria
Randomized and quasi-randomized controlled trials with reported data that assess 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.

Data collection and analysis
Two reviewers independently assessed eligibility, trial quality and extracted data.

Main results
One study met the inclusion criteria (1266 women). This trial has uncertain methodological quality due to lack of reporting. Four hundred and thirty-two women were prescribed bed rest at home and a total of 834 women received a placebo (412) or no intervention (422). Preterm birth before 37 weeks was similar in both groups (7.9% in the intervention group versus 8.5% in the control group), and the relative risk was 0.92 with a 95% confidence interval from 0.62 to 1.37. No other results were available.

Authors' conclusions
There is no evidence, either supporting or refuting the use of bed rest at home or in hospital, to prevent preterm birth. Although bed rest in hospital or at home is widely used as the first step of treatment, there is no evidence that this practice could be beneficial. Due to the potential adverse effects that bed rest could have on women and their families, and the increased costs for the healthcare system, clinicians should not routinely advise women to rest in bed to prevent preterm birth. Potential benefits and harms should be discussed with women facing an increased risk of preterm birth. Appropriate research is mandatory. Future trials should evaluate both the effectiveness of bed rest, and the effectiveness of the prescription of bed rest, to prevent preterm birth.

PLAIN LANGUAGE SUMMARY

No evidence to support or refute bed rest in preventing preterm birth

Although bed rest in hospital or at home is widely used as the first step of treatment, this review finds no evidence to support or refute bed rest in preventing preterm birth. The current practice has been based on observational studies that found an association between hard work or hard physical activity and preterm birth. Due to the potential adverse effects that bed rest could have on women and their families, and the increased costs for the healthcare system, systematic advice of bed rest for preventing preterm birth should not be given to pregnant women.

BACKGROUND

Preterm birth, defined as birth occurring prior to 37 weeks of gestation occurs in around 5% to 10% of all pregnancies. In this large group, newborns that were born before 32 weeks account for most neonatal deaths and disorders (Robertson 1992), contributing to at least 75% of neonatal deaths that are not due to congenital malformations (McCormick 1985). Although there are many different therapies available for preventing preterm birth or its neonatal associated morbidity and mortality, there are very few proven effective to be recommended for clinical use (see Cochrane Reviews: Crowley 2003; Crowther 2003a; King 2003; Smaill 2003).

Bed rest in hospital or at home is widely recommended for the prevention of preterm birth, and is the first step of treatment in many obstetrics text books (Crowther 1991; Cunningham 1993; Schwarcz 1995).

This advice is based on the observation that hard work and hard physical activity during pregnancy could be associated with preterm birth (Saurel 1985; Teitelman 1990), and with the idea that bed rest could reduce uterine activity (Goldenberg 1994).

On the other hand, bed rest may have some adverse effects on other outcomes. It may increase the likelihood of venous thrombosis (Kovacevich 2000), muscle atrophy and symptoms of musculoskeletal (Maloni 2002) and cardiovascular deconditioning (Maloni 1993; Gupton 1997) and maternal weight loss (Maloni 1993); it may be stressful for women (Maloni 1993; Gupton 1997) and their families, (Maloni 2001; May 1994) inducing ambivalent feelings about the pregnancy, or self blame feelings in case of failure to comply with the prescription (Schroeder 1996); it may increase costs for the families, directly because of the expenses for the care of other children, or indirectly through job absenteeism (Mamelle 1984; Maloni 2001). Finally it may also increase healthcare costs (Goldenberg 1994; Allen 1999).

It is, therefore, important to assess the effectiveness and hazards of bed rest by reviewing the evidence from randomized controlled trials.

OBJECTIVES

To evaluate the effect of prescription of bed rest in hospital or at home for preventing preterm birth in pregnant women at high risk of preterm birth.

CRITERIA FOR CONSIDERING STUDIES FOR THIS REVIEW

Types of studies

All published, unpublished and ongoing randomized trials with reported data that assess clinical outcomes in women and their babies who where prescribed bed rest in hospital or at home for preventing preterm birth.

Types of participants

Pregnant women at high risk of spontaneous preterm birth.

High risk of spontaneous preterm birth can be defined according to:
(1) previous history of preterm birth or second trimester miscarriage;
(2) threatened preterm labour;
(3) positive screening test results, eg fetal fibronectin or ultrasound assessment of cervical length;
(4) maternal anthropometric measurements (eg attained weight at 24 to 28 weeks, pre-pregnancy body mass index);
(5) scoring systems based on a combination of different categories of risk factors, including those previously mentioned.

Trials assessing bed rest in women with preterm premature rupture of membranes or multiple pregnancies were not considered (see the related review Crowther 2003b).

Types of intervention

As bed rest is an accepted standard initial therapy for women at high risk of preterm birth, it has usually been used as a control intervention in trials evaluating alternative forms of care for preventing preterm birth. However, our intention in this review was to evaluate the effectiveness of bed rest compared with no intervention. Therefore, we considered trials comparing prescription

of bed rest at home or in hospital with no intervention. Trials with arms including more than one intervention would also be eligible if arms differed only in the prescription of bed rest (ie bed rest and drug versus drug alone). For trials comparing drugs, placebo and bed rest, placebo was considered as no intervention.

Types of outcome measures

Primary outcomes

- Preterm birth (less than 37 weeks);
- perinatal mortality;
- low birthweight (less than 2500 g);
- neonatal intensive care.

Secondary outcomes

Perinatal

- Stillbirth;
- use of corticosteroids (including incomplete courses of corticosteroids);
- preterm birth less than 32 weeks;
- preterm birth less than 28 weeks;
- delivery within 24 hours of treatment;
- delivery within 48 hours of treatment;
- delivery within seven days of treatment;
- mean gestational age at birth (in weeks);
- neonatal respiratory distress syndrome;
- intraventricular haemorrhage;
- necrotizing enterocolitis;
- bronchopulmonary dysplasia;
- surfactant administration;
- neonatal care more than 48 hours;
- duration of neonatal care;
- use of mechanical ventilation;
- need of oxygen therapy.

Maternal

- Maternal mortality;
- caesarean section;
- thromboembolic events;
- maternal infection;
- antenatal maternal infection (chorioamnionitis);
- postpartum maternal infection (endometritis);
- dissatisfaction with care.

Women views (experience and feeling)

Cost-effectiveness

If data were available, subgroup analysis would be performed according to:
(1) Subgroups of participants according to method of risk assessment based on:

- previous obstetric history;
- threatened preterm labour;
- positive screening test results;
- maternal anthropometric measurements;
- selection by scoring systems.

(2) Subgroups of interventions:

- prescription of bed rest at home;
- prescription of bed rest in hospital.

SEARCH METHODS FOR IDENTIFICATION OF STUDIES

See: methods used in reviews.

We searched the Cochrane Pregnancy and Childbirth Group trials register (July 2003).

The Cochrane Pregnancy and Childbirth Group's trials register is maintained by the Trials Search Co-ordinator and contains trials identified from:
1. quarterly searches of the Cochrane Central Register of Controlled Trials (CENTRAL);
2. monthly searches of MEDLINE;
3. handsearches of 30 journals and the proceedings of major conferences;
4. weekly current awareness search of a further 37 journals.

Details of the search strategies for CENTRAL and MEDLINE, the list of handsearched journals and conference proceedings, and the list of journals reviewed via the current awareness service can be found in the 'Search strategies for identification of studies' section within the editorial information about the Cochrane Pregnancy and Childbirth Group.

Trials identified through the searching activities described above are given a code (or codes) depending on the topic. The codes are linked to review topics. The Trials Search Co-ordinator searches the register for each review using these codes rather than keywords.

In addition, we searched the Cochrane Central Register of Controlled Trials (The Cochrane Library, Issue 2, 2003) using the following terms:

#1 PREGNANCY*:ME
#2 PREGNAN*
#3 PERINATOLOGY*:ME
#4 PERINATOLOGY
#5 LABOR-PREMATURE*:ME
#6 PREMATURE
#7 PRETERM
#8 BED-REST*:ME
#9 (BED next REST)
#10 REST*
#11 BED REST
#12 ((((((#1 or #2) or #3) or #4) or #5) or #6) or #7)
#13 (((#8 or #9) or #10) or #11)
#14 (#12 and #13)

We also searched EMBASE (July 2003), LILACS (July 2003) and POPLINE (July 2003) using similar search terms.

METHODS OF THE REVIEW

Two reviewers independently assessed the trials for inclusion and methodological quality. The two reviewers resolved any disagreement by consensus or, if necessary, by a third reviewer.

We assessed the methodological quality of included trials using the methods described in the Cochrane Reviewers' Handbook (Clarke 2000).

Allocation concealment was categorised as:
(a) adequate;
(b) uncertain; or
(c) inadequate.

Blinding and completeness of follow up were assessed for each outcome using the following criteria: for completeness of follow-up: (a) less than 3% of participants excluded, (b) 3% to 9.9% of participants excluded, (c) 10% to 19.9% of participants excluded or (d) 20% or more of participants excluded. For blinding of outcome assessment: (a) single blinding, (b) no blinding or blinding not mentioned.

We extracted the data independently using a previously prepared data extraction form. The results were expressed as relative risks for dichotomous outcomes or weighted mean difference for continuous variables, and included 95% confidence intervals using the Cochrane Review Manager software (RevMan 2000).

We included studies irrespective of their methodological quality. In the case of significant heterogeneity among study outcomes, we performed a sensitivity analysis and based our conclusions on the results of studies with the best methodological quality.

DESCRIPTION OF STUDIES

Our search identified four articles that met the initial criteria for hard copy scrutiny. One article (Larsen 1980) reported a trial comparing the prescription of ritodrine and bed rest versus bed rest alone. As both arms considered bed rest, the study was excluded from this review. A second article (Hesseldahl 1979) was a previous report of the same data of Larson's trial; hence it was not considered.

A third article (Ma 1992) published in a Chinese journal reported a trial comparing magnesium sulfate versus bed rest. From the abstract it is not clear if the study fulfills the inclusion criteria of this review. Thus, it is currently being translated into English and is cited under 'Studies awaiting assessment'.

The fourth article (Hobel 1994) reported a cluster randomized controlled trial designed to evaluate a program for prevention of preterm birth that included an educational intervention plus increased clinic visits. Eight hospitals were randomized to either intervention (5) or control units (3). The intervention hospitals had to apply the prevention program to all high-risk pregnant women identified through a scoring system. Besides the prevention program, women in intervention hospitals were randomized to receive one of five interventions: bed rest, psychosocial support by social worker, progestines, placebo or no intervention. So far, this is the only study included in this review.

METHODOLOGICAL QUALITY

We did not consider the overall quality of the Hobel study (Hobel 1994). We only considered the comparison within the intervention hospitals, in which individual women were randomized to one of five interventions, including bed rest. Few details on the methods used in this secondary trial are included in the report, preventing us from evaluating the internal validity.

Details about method of randomization, allocation concealment, and completeness of follow up are not described. Neither is there a description of baseline characteristics of randomized women. Moreover, the number of women originally included in the intervention hospitals does not match the numbers included in the table of results. Although an explanation for this disagreement is included in the text, there are still differences that cannot be explained.

The only reported outcome is preterm birth rate.

We contacted the author to obtain methodological details that were not mentioned in the publication and he is trying to find that information.

RESULTS

One study met the criteria for inclusion in this review. A total of 1774 women were randomized in five hospitals: 432 to prescription of bed rest; 411 to progestin; 407 to social support; 412 to placebo and 422 to no intervention. In this analysis, we compared the results in women assigned to bed rest (432) versus women assigned to placebo and no intervention (834). Both placebo and no intervention groups were considered as controls (Hrobjartsson 2001).

Preterm birth before 37 weeks was similar in both groups (7.9% in the intervention group versus 8.5% in the control group), and the relative risk was 0.92 with a 95% confidence interval from 0.62 to 1.37. No other results were available.

DISCUSSION

The only trial included in this review has uncertain methodological quality due to lack of reporting. Thus, the validity of the results cannot be supported. It is worth mentioning that in this trial the evaluation of bed rest was a secondary objective among others.

AUTHORS' CONCLUSIONS

Implications for practice

Although bed rest is widely used as the first step of treatment, there is no evidence either supporting or refuting its use at home or in hospital to prevent preterm birth. Due to the potential adverse effects that bed rest could have on women and their families, and the increased costs for the healthcare system, routine advice of bed rest for preventing preterm birth should not be given to pregnant women. Health providers should discuss the potential benefits and harms of bed rest with women facing an increased risk of preterm birth, and allow them to decide if they should do it or not. Also, if they decide to opt for bed rest then they should also decide how often and for how long. A similar recommendation regarding hospitalization for bed rest in twin pregnancies at high risk of preterm birth is made in another review (Crowther 2003b).

Implications for research

Bed rest is one of the most commonly prescribed interventions for women with high risk pregnancies, but is one of the less evaluated. Appropriate research is mandatory for those who believe that bed rest may result in a worthwhile reduction in preterm birth and neonatal morbidity. The trials should evaluate both the efficacy of bed rest and the effectiveness of prescribing bed rest to prevent preterm birth.

POTENTIAL CONFLICT OF INTEREST

None known.

ACKNOWLEDGEMENTS

To Lynn Hampson, Trials Search Co-ordinator of the Cochrane Pregnancy and Childbirth Group. We would also like to thank Judith A Maloni for her advice and support through the protocol and review process.

SOURCES OF SUPPORT

External sources of support

- No sources of support supplied

Internal sources of support

- Latin American Center for Perinatology - Pan American Health Organization - World Health Organization URUGUAY

REFERENCES

References to studies included in this review

Hobel 1994 *{published data only}*

Hobel C, Ross M, Bemis R, Bragonier J, Nessim S, Sandhu M, et al. The West Los Angeles preterm birth prevention project: I. Program impact on high-risk women. *American Journal of Obstetrics and Gynecology* 1994;**170**:54–62.

References to studies excluded from this review

Larsen 1980

Hesseldahl H. A Danish multicenter study on ritodrine in the treatment of pre-term labour. Danish Medical Bulletin 1979; Vol. 26, issue 3:116–8.

Larsen J, Hansen M, Hesseldahl H, Kristoffersen K, Larsen P, Osler M, et al. Ritodrine in the treatment of preterm labour. A clinical trial to compare a standard treatment with three regimens involving the use of ritrodine. *British Journal of Obstetrics and Gynaecology* 1980; **87**(11):949–57.

References to studies awaiting assessment

Ma 1992

Ma L. Magnesium sulfate in prevention of preterm labor. *Chung Hua I Hsueh Tsa Chih Taipei* 1992;**72**(3):158–61.

Additional references

Allen 1999

Allen C, Glasziou P, Del Mar C. Bed rest: a potentially harmful treatment needing more careful evaluation. *Lancet* 1999;**354**:1229–33.

Clarke 2000

Clarke M, Oxman AD, (editors). Cochrane Reviewers' Handbook 4.1 [updated June 2000]. In: Review Manager (RevMan) [Computer program]. Version 4.1. Oxford, England: The Cochrane Collaboration, 2000.

Crowley 2003

Crowley P. Prophylactic corticosteroids for preterm birth (Cochrane Review). *The Cochrane Library* 2003, Issue 4. Art. No.: CD000065. DOI:10.1002/14651858.CD000065.pub2.

Crowther 1991

Crowther C, Chalmers I. Bed rest and hospitalization during pregnancy. In: ChalmersI, EnkinM, KeirseMJNC editor(s). *Effective care in pregnancy and childbirth*. New York: Oxford University Press, 1991: 625.

Crowther 2003a

Crowther CA, Moore V. Magnesium maintenance therapy for preventing preterm birth after threatened preterm labour (Cochrane Review). *The Cochrane Library* 2003, Issue 4. Art. No.: CD000940. DOI:10.1002/14651858.CD000940.

Crowther 2003b

Crowther CA. Hospitalisation and bed rest for multiple pregnancy (Cochrane Review). *The Cochrane Library* 2003, Issue 4. Art. No.: CD000110. DOI:10.1002/14651858.CD000110.

Cunningham 1993

Cunningham FG, MacDonald PC, Leveno KJ, Gant NF, Gilstrap III LG. *Williams obstetrics*. 19th Edition. Norwalk, Connecticut: Appleton & Lange, 1993:868.

Goldenberg 1994

Goldenberg RL, Cliver SP, Bronstein J, Cutter GR, Andrews WW, Mennemeyer ST. Bed rest in pregnancy. *Obstetrics and Gynecology* 1994;**84**:131–6.

Gupton 1997

Gupton A, Heaman M, Ashcroft T. Bed rest from the perspective of the high-risk pregnant woman. *Journal of Obstetric, Gynecologic and Neonatal Nursing* 1997;**26**(4):423–30.

Hesseldahl 1979

Hesseldahl H. A Danish multicenter study on ritodrine in the treatment of pre-term labour. Danish Medical Bulletin 1979; Vol. 26, issue 3:116–8.

Hrobjartsson 2001

Hrobjartsson A, Gotzsche PC. Is the placebo powerless?. *New England Journal of Medicine* 2001;**344**(21):1594–602.

King 2003

King J, Flenady V. Antibiotics for preterm labour with intact membranes (Cochrane Review). *The Cochrane Library* 2003, Issue 4.

Kovacevich 2000

Kovacevich GJ, Gaich SA, Lavin JP, Hopkins MP, Crane SS, Stewart J, et al. The prevalence of thromboembolic events among women with extended bed rest prescribed as part of the treatment for premature labor or preterm premature rupture of membranes. *American Journal of Obstetrics and Gynecology* 2000;**182**(5):1089–92.

Maloni 1993

Maloni JA, Chance B, Zhang C, Cohen AW, Betts D, Gange SJ. Physical and psychosocial side effects of antepartum hospital bed rest. *Nursing Research* 1993;**42**(4):197–203.

Maloni 2001

Maloni JA, Brezinski-Tomasi JE, Johnson LA. Antepartum bed rest: effect upon the family. *Journal of Obstetric, Gynecologic and Neonatal Nursing* 2001;**30**(2):165–73.

Maloni 2002

Maloni JA, Kane JH, Suen LJ, Wang KK. Dysphoria among high-risk pregnant hospitalized women on bed rest: a longitudinal study. *Nursing Research* 2002;**51**(2):92–9.

Mamelle 1984

Mamelle N, Laumon B, Lazar P. Prematurity and occupational activity during pregnancy. *American Journal of Epidemiology* 1984;**119** (3):309–22.

May 1994

May KA. Impact of maternal activity restriction for preterm labor on the expectant father. *Journal of Obstetrics, Gynecology and Neonatal Nursing* 1994;**23**(3):246–51.

McCormick 1985

McCormick MC. The contribution of low birth weight to infant mortality and childhood morbidity. *New England Journal of Medicine* 1966;**312**:82–90.

RevMan 2000

The Cochrane Collaboration. Review Manager (RevMan). 4.1 for Windows. Oxford, England: The Cochrane Collaboration, 2000.

Robertson 1992

Robertson PA, Sniderman SH, Laros RK Jr, Cowan R, Heilbran D, Goldenberg RL, et al. Neonatal morbidity according to gestational age and birth weight from tertiary care centers in the United States, 1983 through 1986. *American Journal of Obstetrics and Gynecology* 1992;**166**:1629–41.

Saurel 1985

Saurel-Cubizolles MJ, Kaminski M, Llado-Arkhipoff J, Du Mazaubrun C, Estryn-Behar M, Berthier C, et al. Pregnancy and its outcome among hospital personnel according to occupation and working conditions. *Journal of Epidemiology and Community Health* 1985; **39**(2):129–34.

Schroeder 1996

Schroeder CA. Women's experience of bed rest in high-risk pregnancy. *Image - The Journal of Nursing Scholarship* 1996;**28**(3):253–8.

Schwarcz 1995

Schwarcz RL, Duverges CA, Díaz AG, Fescina RH. Anomalias de la duración del embarazo. *Obstetricia*. 5th Edition. Buenos Aires: El Ateneo, 1995:218–32.

Smaill 2003

Smaill F. Antibiotics for asymptomatic bacteuria in pregnancy (Cochrane Review). *The Cochrane Library* 2003, Issue 4.

Teitelman 1990
Teitelman AM, Welch LS, Hellenbrand KG, Bracken MB. Effect of maternal work activity on preterm birth and low birth weight. *American Journal of Epidemiology* 1990;**131**:104–13.

TABLES

Characteristics of included studies

Study	Hobel 1994
Methods	Cluster randomized trial designed to evaluate an educational intervention. Eight hospitals were randomized to intervention (5) and control (8). Women in the intervention units were randomized to one of five interventions.
Participants	High risk pregnant women evaluated by risk scoring system. 1774 high risk pregnant women in the five hospitals of the intervention group and 880 pregnant women in the three hospitals of the control group.
Interventions	Intervention hospitals carried out an educational intervention consisting of identification of preterm labor, steps to take if signs of preterm labor occurred, and prevention strategies. Besides this intervention, women were randomized to one of five interventions: Bed rest at home (432) Placebo (412) Progestine (411) Social support (407) No intervention (422).
Outcomes	Preterm birth rate (< 37 weeks).
Notes	For this review we only took into account women individually randomized in the intervention group.
Allocation concealment	B – Unclear

Characteristics of excluded studies

Study	Reason for exclusion
Larsen 1980	The main objective was to evaluate ritodrine for preventing preterm birth. The compared interventions were ritrodrine and bed rest versus bed rest alone.

ANALYSES

Comparison 01. Bed rest versus no intervention

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Preterm birth	1	1266	Relative Risk (Fixed) 95% CI	0.92 [0.62, 1.37]

INDEX TERMS

Medical Subject Headings (MeSH)

*Bed Rest; Obstetric Labor, Premature [*prevention & control]; Randomized Controlled Trials

MeSH check words

Female; Humans; Pregnancy

COVER SHEET

Title	Bed rest in singleton pregnancies for preventing preterm birth
Authors	Sosa C, Althabe F, Belizán J, Bergel E
Contribution of author(s)	Claudio Sosa: Design of protocol, writing of protocol and final review. Review of articles. Fernando Althabe: Design of protocol, writing of protocol and review. Review of articles. Co-ordination of review team and communication with the editorial base. Jose Belizan: Design of protocol, writing of protocol and review. Revisions of protocol and final review. Eduardo Bergel: Design of protocol, writing of protocol and review. Revisions of protocol and final review.
Issue protocol first published	2002/2
Review first published	2004/1
Date of most recent amendment	19 August 2005
Date of most recent SUBSTANTIVE amendment	01 October 2003
What's New	Information not supplied by author
Date new studies sought but none found	Information not supplied by author
Date new studies found but not yet included/excluded	01 July 2003
Date new studies found and included/excluded	01 July 2003
Date authors' conclusions section amended	Information not supplied by author
Contact address	Dr Fernando Althabe Unidad de Investigación Perinatal/Perinatal Research Unit Hospital de Clínicas piso 15. Av. Italia s/n Montevideo 11600 URUGUAY E-mail: althabef@gmail.com Tel: +598 2 4864175 Fax: +598 2 4864175
DOI	10.1002/14651858.CD003581.pub2
Cochrane Library number	CD003581
Editorial group	Cochrane Pregnancy and Childbirth Group
Editorial group code	HM-PREG

GRAPHS AND OTHER TABLES

Analysis 01.01. Comparison 01 Bed rest versus no intervention, Outcome 01 Preterm birth

Review: Bed rest in singleton pregnancies for preventing preterm birth

Comparison: 01 Bed rest versus no intervention

Outcome: 01 Preterm birth

Study	Treatment n/N	Control n/N	Relative Risk (Fixed) 95% CI	Weight (%)	Relative Risk (Fixed) 95% CI
Hobel 1994	34/432	71/834		100.0	0.92 [0.62, 1.37]
Total (95% CI)	432	834		100.0	0.92 [0.62, 1.37]
Total events: 34 (Treatment), 71 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect z=0.39 p=0.7