

# Mobilization Versus Bed Rest Following Embryo Transfer (Review)

Natalija Vedmedovska  
*Paula Stradina University*  
*Riga Maternity House*  
*Riga, Latvia*

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# Bed rest versus free mobilization following embryo transfer



Is bed rest following ET  
necessary?

# Background

- Embryo transfer (ET) is a final step in the in vitro fertilization (IVF) treatment cycle. Since the early days of human IVF and ET, rest in bed for hours immediately following the transfer has been advocated and widely practiced. However, there is no scientific validation for this practice, which is both time-consuming for patients and increases space occupancy in hospital or clinic, and has never been shown to be related to a higher success rate.

# Objectives

- To evaluate the effect of bed rest and mobilization following embryo transfer on the results of in vitro fertilization

# Search Strategy

- Electronic databases searching

Medline, Pub Med,  
Cochrane database  
Obgynnet

- Hand and reference searching

# Inclusion Criteria

- Randomized controlled trials comparing bed rest and free mobilization
- In any language
- Published from 1995-2004

# Type of participants

- Infertile women, who underwent in-vitro fertilization



# Type of intervention

- Mobilization
- Bed rest

# Type of outcome

- Clinical pregnancy rate (PR) per cycle
- Implantation rate (IR) per embryo transfer
- "Take home baby rate"
- Twin pregnancy
- Miscarriage

# Description of studies

- G. Botta et al. 1997      • 182 (n)
- K. Rezabek et al. 2001      • 38 (n)
- Z. Amarin et al. 2004      • 378 (n)

# Methodological quality of studies

- Method of randomization explained (2)
- Types of participants, interventions, outcomes clearly defined (3)
- Analysis by intention to treat (1)
- Allocation of concealment (unclear in 1)

# Results

- 598 women randomized
- Mobilization following ET associated with better implantation rate and clinical pregnancy rate
- “Take home baby” was higher in no bed rest group
- No statistical differences was found between the two groups for twin pregnancies and miscarriages

# Conclusions

- There is no evidence supporting the use of bed rest in hospital or at home after ET to increase the implantation or the pregnancy rate
- No restriction of the routine activity of patient needs to be advised after ET
- Immediate return to routine activities may reduce maternal stress
- Free mobilization after ET is both cost-effective and cost saving

# Clinical pregnancy rate

Study, number of participants	24 hours rest after ET	20-60 min rest after ET	RR (95%-CI)	P
Botta et al. 1997; 182	21.6%	21.3%		P>0.05
Rezabek et al. 2001; 38	22.2%	50%		0.08
Amarin et al. 2004; 378	18%	22%	1.11 0.87-1.41	P<0.05

# Implantation rate

Study, number of participants	24 hours rest after ET	20-60 min rest after ET	RR (95%-CI)	P
Botta et al. 1997; 182	24.1%	23.6%		P>0.05
Rezabek et al. 2001; 38	14.5%	22.5%		0.26
Amarin et al. 2004; 378	9%	14.4%	1.27; 1.10-1.47	



# Take home baby

Study, number of participants	24 hours rest after ET	20-60 min rest after ET	P
Rezabek et al. 2001; 38	11%	40%	0.07

# Twin pregnancies

Study, number of participants	24 hours rest after ET	20-60 min rest after ET	P
Botta et al. 1997; 182	14.2%	13.6%	P>0.05
Amarin et al. 2004; 378	9%	20%	P<0.05

# Miscarriages

Study, number of participants	24 hours rest after ET	20-60 min rest after ET	RR (95%-CI)	p
Botta et al. 1997; 182	19%	18.1%		P>0.05
Amarin et al. 2004; 378	5%	9%	1.31 0.96-1.78	P<0.05



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