



UNIVERSITÀ DEGLI STUDI DI MILANO

## Corso di Perfezionamento

Nutrizione in

Età Evolutiva

A.A. 2014/2015



Department of Clinical Sciences and

Community Health

Cattedra di Neonatologia

**27 aprile 2015**

Lettura di un caso clinico  
da parte di

Paola Agnese Mauri  
Infermiera Ostetrica Ph.D

**MED/47**

# Il caso: “anamnesi materna”

- Madre nata da parto a termine, con eutocia;
- 3200 g di peso alla nascita;
- allattata al seno in modo complementare fino al primo mese di vita e poi in modo artificiale;
- anamnesi patologica remota negativa.

# Il caso: “anamnesi materna”

- 38 anni;
- laureata a ciclo unico in giurisprudenza;
- avvocato presso uno studio associato;
- coniugata;
- secondigravida, primipara (1 figlio di 3 anni, nato a 37 settimane, vivo e sano, non allattato al seno “*perché non avevo latte*”).

# Il caso: “anamnesi ostetrica attuale”

- diagnosi di gravidanza alla 6 settimana con test di farmacia;
- confermata con prima visita di controllo alla 7 settimana di gravidanza presso studio privato di ginecologo, con ecografia che conferma epoca gestazionale;
- gravidanza seguita dallo stesso ginecologo con controlli ematochimici ed ecografici ogni mese: gravidanza fisiologica;
- dopo aver sentito parere dell’ostetrica durante il corso di accompagnamento alla nascita, riferisce di essere motivata a procedere con allattamento esclusivo al seno

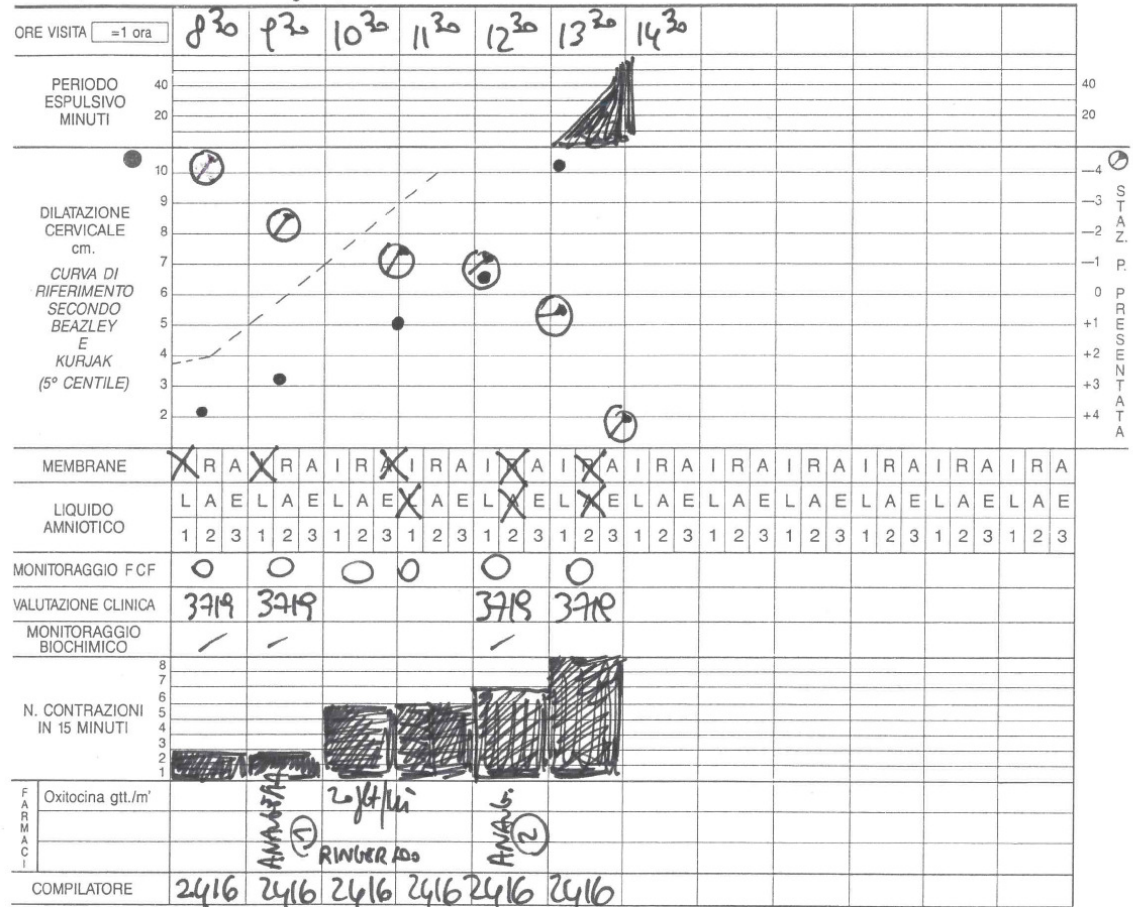
# **Il caso: “anamnesi ostetrica attuale”**

## **L’induzione del travaglio**

- alla 35<sup>6</sup> settimana durante una visita di controllo dal ginecologo la donna chiede che le venga indotto il parto, in quanto è il 12 luglio e lei ha prospettato di andare in vacanza nel mese di agosto;
- il ginecologo le segnala che durante il mese di agosto sarà in ferie anche lui.

# Il caso: “anamnesi ostetrica attuale” L’andamento del travaglio

bishop score all'ingresso: 4  
 rottura delle membrane: data            ora            PA 110/60 T 36<sup>2</sup>  
 presentazione CEFAUCA posizione: in travaglio OISA al parto OISA  
 travaglio: SP IPg IAmx 10x per indicazione del medico curante



parto: ~~SP~~ X VO F TC per             
 ora 1355 episiotomia ANAMEMANA lacerazione             
 secondamento: ~~SP~~ MAN PE cc 560 funicolo monocorporeo - 3 nodi  
 feto: ~~M~~ F gr. 2570 apgar: 1' = 8 5' = 9 pH funicolo 7.28/7.35

NOTE: felle e felle  
Colonna vescicola atoniche al momento inizio dell'espulsione: diueni nel 400

# **Il caso: “anamnesi ostetrica attuale”**

## **Il post partum e puerperio**

- vengono rimandate le cure neonatali dopo le prime due ore dalla nascita
- la madre riferisce di sentirsi molto stanca e una lieve cefalea a partire dalle 3 ore dopo il parto;
- l’anestesista la invita a mantenere la posizione supina e si pratica terapia infusionale per “lieve cefalea post peridurale”;
- la donna resta al letto (si alza solo per andare al bagno) e non realizza rooming-in full time in quanto riferisce che ha bisogno di dormire la notte.

# Le criticità del caso

La madre non è stata allattata al seno in modo esclusivo e il suo primo figlio non è riuscita ad allattarlo perché “non aveva latte” ...

Questa volta riferisce di essere particolarmente motivata a procedere con un allattamento esclusivo

1. [Meedya S, Fahy K, Kable A](#). 2010. Factors that positively influence breastfeeding duration to 6 months: a literature review. [Women Birth](#). 23(4):135-45.





available at [www.sciencedirect.com](http://www.sciencedirect.com)



journal homepage: [www.elsevier.com/locate/wombi](http://www.elsevier.com/locate/wombi)



REVIEW

## Factors that positively influence breastfeeding duration to 6 months: A literature review

Shahla Meedya\*, Kathleen Fahy, Ashley Kable

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Received 26 August 2009; received in revised form 2 February 2010; accepted 3 February 2010

**Conclusion:** The modifiable factors that are positively associated with breastfeeding duration are the woman's breastfeeding intention, her breastfeeding self-efficacy and her social support. Intervention studies to date have focussed on modifying these factors individually with variable results. No interventional studies have been conducted with the aim of positively modifying all three factors simultaneously.

1. [Meedya S](#), [Fahy K](#), [Kable A](#). 2010. Factors that positively influence breastfeeding duration to 6 months: a literature review. [Women Birth](#). 23(4):135-45.

# Le criticità del caso

La donna chiede che le venga indotto il parto;  
viene applicata un'analgesia epidurale precoce;  
durante il travaglio sono mantenute la postura  
supina alternata a quella semiseduta  
Viene applicata la perfusione ossitocica e si  
praticano tre manovre di Kristeller

2. [Anim-Somuah M](#), [Smyth RM](#), [Jones L](#). 2011. Epidural versus non-epidural or no analgesia in labour. [Cochrane Database Syst Rev](#). 7;(12).
3. [Sng BL](#), [Leong WL](#), [Zeng Y](#), [Siddiqui FJ](#), [Assam PN](#), [Lim Y](#), [Chan ES](#), [Sia AT](#). 2014. Early versus late initiation of epidural analgesia for labour. [Cochrane Database Syst Rev](#). 9;(10).
4. [Kemp E](#), [Kingswood CJ](#), [Kibuka M](#), [Thornton JG](#). 2013. Position in the second stage of labour for women with epidural anaesthesia. [Cochrane Database Syst Rev](#). 31;(1).
5. [Wiklund I](#), [Norman M](#), [Uvnäs-Moberg K](#), [Ransjö-Arvidson AB](#), [Andolf E](#). 2009. Epidural analgesia: breast-feeding success and related factors. [Midwifery](#). 25(2):e31-38.

# Epidural versus non-epidural or no analgesia in labour (Review)

Anim-Somuah M, Smyth RMD, Jones L



## **AUTHORS' CONCLUSIONS:**

Epidural analgesia appears to be effective in reducing pain during labour. However, women who use this form of pain relief are at increased risk of having an instrumental delivery. Epidural analgesia had no statistically significant impact on the risk of caesarean section, maternal satisfaction with pain relief and long-term backache and did not appear to have an immediate effect on neonatal status as determined by Apgar scores. Further research may be helpful to evaluate rare but potentially severe adverse effects of epidural analgesia on women in labour and long-term neonatal outcomes.

2. [Anim-Somuah M](#), [Smyth RM](#), [Jones L](#). 2011. Epidural versus non-epidural or no analgesia in labour. [Cochrane Database Syst Rev](#). 7;(12).

# Early versus late initiation of epidural analgesia for labour (Review)

Sng BL, Leong WL, Zeng Y, Siddiqui FJ, Assam PN, Lim Y, Chan ESY, Sia AT



## **AUTHORS' CONCLUSIONS:**

There is predominantly high-quality evidence that early or late initiation of epidural analgesia for labour have similar effects on all measured outcomes. However, various forms of alternative pain relief were given to women who were allocated to delayed epidurals to cover that period of delay, so that is it hard to assess the outcomes clearly. We conclude that for first time mothers in labour who request epidurals for pain relief, it would appear that the time to initiate epidural analgesia is dependent upon women's requests.

3. [Sng BL](#), [Leong WL](#), [Zeng Y](#), [Siddiqui FJ](#), [Assam PN](#), [Lim Y](#), [Chan ES](#), [Sia AT](#). 2014. Early versus late initiation of epidural analgesia for labour. [Cochrane Database Syst Rev](#). 9;(10).

# Position in the second stage of labour for women with epidural anaesthesia (Review)

Kemp E, Kingswood CJ, Kibuka M, Thornton JG



## **AUTHORS' CONCLUSIONS:**

There are insufficient data to say anything conclusive about the effect of position for the second stage of labour for women with epidural analgesia. Women with an epidural should be encouraged to use whatever position they find comfortable in the second stage of labour. Future research should involve large trials of positions that women can maintain and predefined endpoints. One large trial is ongoing.

4. [Kemp E](#), [Kingswood CJ](#), [Kibuka M](#), [Thornton JG](#). 2013. Position in the second stage of labour for women with epidural anaesthesia. [Cochrane Database Syst Rev](#). 31;(1).



## Epidural analgesia: Breast-feeding success and related factors

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Kerstin Uvnäs-Moberg, MD, PhD (Professor)<sup>d</sup>, Anna-Berit Ransjö-Arvidson, RNM,  
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**Findings:** significantly fewer babies of mothers with EDA during labour suckled the breast within the first 4 hours of life [odds ratio (OR) 3.79]. These babies were also more often given artificial milk during their hospital stay (OR 2.19) and fewer were fully breast fed at discharge (OR 1.79). Delayed initiation of breast feeding was also associated with a prolonged first (OR 2.81) and second stage (OR 2.49) and with the administration of oxytocin (OR 3.28). Fewer newborns of multiparae received artificial milk during their hospital stay (OR 0.58). It was also, but to a lesser extent, associated with oxytocin administration (OR 2.15). Full breast feeding at discharge was also positively associated with multiparity (OR 0.44) and birth weight between 3 and 4 kg (OR 0.42).

5. [Wiklund I](#), [Norman M](#), [Uvnäs-Moberg K](#), [Ransjö-Arvidson AB](#), [Andolf E](#). 2009. Epidural analgesia: breast-feeding success and related factors. [Midwifery](#). 25(2):e31-38.

**Table 2** Characteristics of study population (n = 702).

Variable	EDA group (n = 351)		Non-EDA group (n = 351)	
	n	(%)	n	(%)
<b>Age</b>				
Mean (years)	32.6		32.3	
<b>Parity</b>				
Primiparae	194	(55.3)	194	(55.3)
Multiparae	157	(44.7)	157	(44.7)

EDA, epidural analgesia.

5. [Wiklund I](#), [Norman M](#), [Uvnäs-Moberg K](#), [Ransjö-Arvidson AB](#), [Andolf E](#). 2009. Epidural analgesia: breast-feeding success and related factors. [Midwifery](#). 25(2):e31-38.



**Table 4** Odds ratios, 95% confidence intervals and *p*-values for post hoc test for the univariate models of breast feeding within 4 hours, administration of artificial milk supplement during hospital stay, and breast feeding at discharge.

Comparison		Odds ratio	SE (odds ratio)	95% confidence intervals		<i>p</i> -value
				Lower	Upper	
Initiation of breast feeding	Multiparity versus nulliparity	1.04	0.32	0.55	1.98	0.9038
	Gestational age >41 weeks versus <37 weeks	0.16	7.72	0.01	1.87	0.1447
	Gestational age >41 weeks versus 37–41 weeks	0.34	2.26	0.08	1.55	0.1645
	Gestational age 37–41 weeks versus >41 weeks	0.47	2.13	0.07	3.44	0.4597
	First stage >12 hours versus <6 hours	2.81	0.16	1.19	6.68	0.0189
	First stage >12 hours versus 6–12 hours	1.84	0.22	0.84	4.03	0.1286
	First stage 6–12 hours versus <6 hours	1.53	0.31	0.61	3.85	0.3657
	Second stage >60 mins versus <30 mins	2.49	0.17	1.08	5.71	0.0317
	Second stage >60 mins versus 30–60 mins	0.99	0.40	0.45	2.17	0.9834
	Second stage 30–60 mins versus <30 mins	2.51	0.18	1.04	6.04	0.0403
	Oxytocin infusion versus no infusion	3.28	0.11	1.57	6.84	0.0015
	EDA versus no EDA	3.79	0.10	1.82	7.89	0.0004
Neonatal weight <3000g versus >3000	0.50	0.92	0.20	1.22	0.1269	

5. [Wiklund I](#), [Norman M](#), [Uvnäs-Moberg K](#), [Ransjö-Arvidson AB](#), [Andolf E](#). 2009. Epidural analgesia: breast-feeding success and related factors. [Midwifery](#). 25(2):e31-38.



**Table 4** Odds ratios, 95% confidence intervals and *p*-values for post hoc test for the univariate models of breast feeding within 4 hours, administration of artificial milk supplement during hospital stay, and breast feeding at discharge.

Comparison		Odds ratio	SE (odds ratio)	95% confidence intervals		<i>p</i> -value
				Lower	Upper	
Artificial milk supplement given during hospital stay	Multiparity versus nulliparity	0.58	0.44	0.35	0.97	0.0371
	Gestational age >41 weeks versus <37 weeks	0.45	1.77	0.09	2.21	0.3292
	Gestational age >41 weeks versus 37–41 weeks	0.41	1.54	0.12	1.44	0.1665
	Gestational age 37–41 weeks versus >41 weeks	1.10	0.47	0.40	3.03	0.8558
	First stage >12 hours versus <6 hours	1.21	0.31	0.58	2.53	0.6162
	First stage >12 hours versus 6–12 hours	1.40	0.19	0.83	2.35	0.2091
	First stage 6–12 hours versus <6 hours	0.87	0.47	0.39	1.93	0.7244
	Second stage >60 mins versus <30 mins	1.27	0.29	0.62	2.64	0.5143
	Second stage >60 mins versus 30–60 mins	1.42	0.18	0.85	2.38	0.1800
	Second stage 30–60 mins versus <30 mins	0.90	0.43	0.42	1.92	0.7781
	Oxytocin infusion versus no infusion	2.15	0.12	1.28	3.61	0.0039
	EDA versus no EDA	2.19	0.11	1.36	3.52	0.0012
	Neonatal weight <3000g versus >3000	0.68	0.54	0.33	1.40	0.2922
Breast feeding at discharge	Multiparity versus nulliparity	0.44	0.72	0.24	0.82	0.0095
	Gestational age >41 weeks versus <37 weeks	0.45	1.85	0.09	2.28	0.3336
	Gestational age >41 weeks versus 37–41 weeks	0.27	2.46	0.07	0.96	0.0436

5. [Wiklund I, Norman M, Uvnäs-Moberg K, Ransjö-Arvidson AB, Andolf E.](#) 2009. Epidural analgesia: breast-feeding success and related factors. [Midwifery.](#) 25(2):e31-38.

Table 4 (continued)

Comparison	Odds ratio	SE (odds ratio)	95% confidence intervals		p-value
			Lower	Upper	
Gestational age 37–41 weeks versus > 41 weeks	1.68	0.32	0.59	4.83	0.3323
First stage > 12 hours versus < 6 hours	1.48	0.28	0.66	3.31	0.3415
First stage > 12 hours versus 6–12 hours	1.18	0.29	0.61	2.30	0.6241
First stage 6–12 hours versus < 6 hours	1.25	0.36	0.51	3.06	0.6227
Second stage > 60 mins versus < 30 mins	1.02	0.45	0.42	2.46	0.9732
Second stage > 60 mins versus 30–60 mins	1.15	0.26	0.63	2.07	0.6533
Second stage 30–60 mins versus < 30 mins	0.89	0.52	0.36	2.17	0.7918
Oxytocin infusion versus no infusion	1.15	0.24	0.66	1.98	0.6255
EDA versus no EDA	1.79	0.16	1.02	3.14	0.043
Neonatal weight < 3000 g versus > 3000	0.42	0.93	0.19	0.89	0.0241

EDA, epidural analgesia; SE, standard error.

5. [Wiklund I](#), [Norman M](#), [Uvnäs-Moberg K](#), [Ransjö-Arvidson AB](#), [Andolf E](#). 2009. Epidural analgesia: breast-feeding success and related factors. [Midwifery](#). 25(2):e31-38.



## Retrospective study of the association between epidural analgesia during labour and complications for the newborn

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J. Ramos-Torrecillas, PhD (Nurse and Professor)<sup>b,c</sup>, E. De Luna-Bertos, PhD (Nurse and Professor)<sup>b,c</sup>, C. Ruiz, PhD (Professor)<sup>b,c,d,\*</sup>, F.M. Ocaña-Peinado, PhD (Professor)<sup>e</sup>

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<sup>b</sup> Health Sciences Group BIO277, Department of Nursing, University of Granada, Spain

<sup>c</sup> Instituto de Investigación Biosanitaria ibs.Granada, University of Granada, Spain

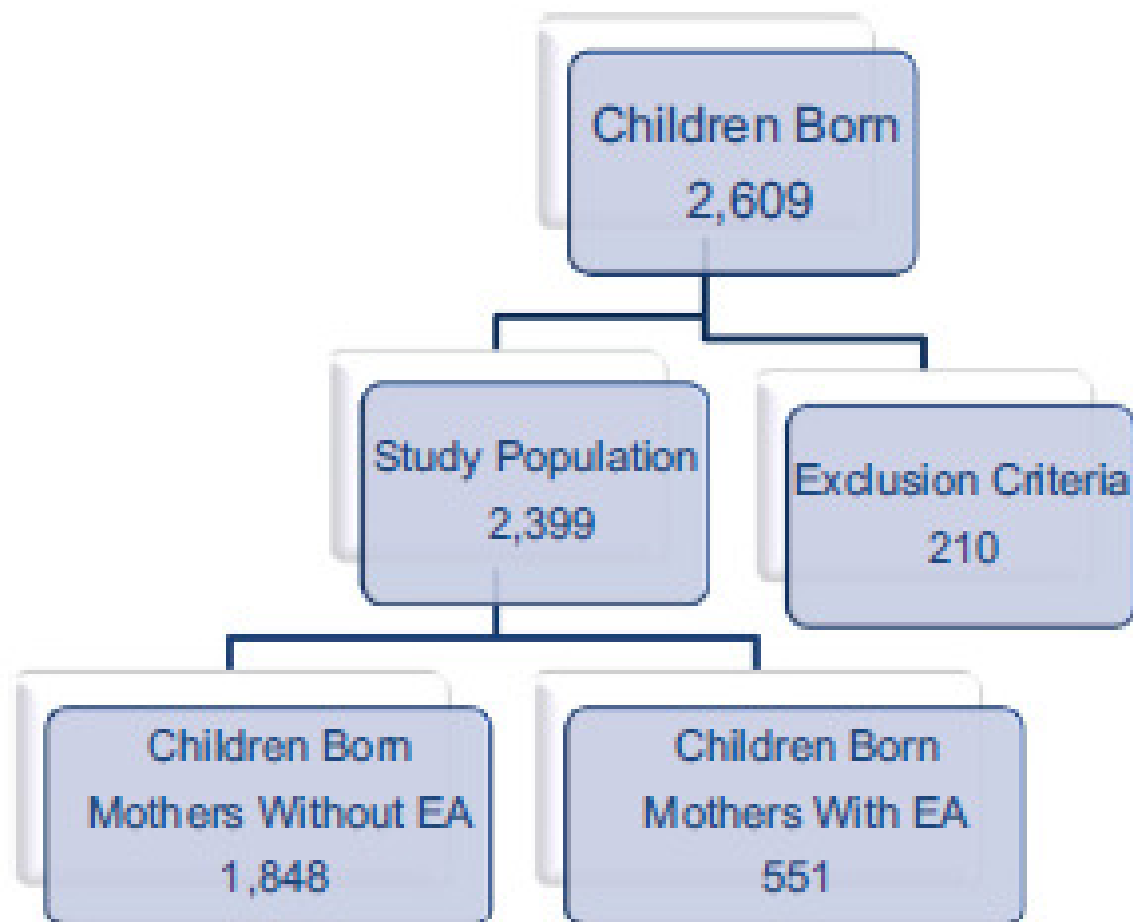
<sup>d</sup> Institute of Neuroscience, University of Granada, Spain

<sup>e</sup> Department of Statistics and Operations Research, School of Pharmacy, University of Granada, Spain

**Key conclusions:** Apgar index values at one minute and five minutes were slightly but significantly lower in neonates whose mothers had received epidural analgesia. Neonatal intensive care unit admission was significantly more frequent in the epidural versus non-epidural group. Resuscitation was significantly more frequent in the epidural versus non-epidural group. Early breast feeding onset was more frequent in the non-epidural group. The adverse effect of epidural analgesia on early lactation remained significant after adjusting for NICU admission and the need for resuscitation in a logistic regression analysis. *Epidural analgesia may have adverse effects on newborns, although the risks are low, and further research is required to elucidate the causal nature of this relationship.*

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- Herrera-Gómez A, García-Martínez O, Ramos-Torrecillas J, De Luna-Bertos E, Ruiz C, Ocaña-Peinado FM. 2015. Retrospective study of the association between epidural analgesia during labour and complications for the newborn. [Midwifery](#). [Epub ahead of print]



**Fig. 1.** Flow chart with the study population distribution.

6. [Herrera-Gómez A](#), [García-Martínez O](#), [Ramos-Torrecillas J](#), [De Luna-Bertos E](#), [Ruiz C](#), [Ocaña-Peinado FM](#). 2015. Retrospective study of the association between epidural analgesia during labour and complications for the newborn. [Midwifery](#). [Epub ahead of print]

**Table 2**

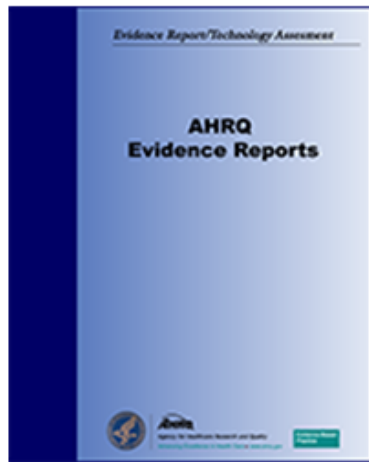
Effect of epidural analgesia on newborn (variables: need for NICU admission, need for resuscitation and early onset of breast feeding).

	Without epidural analgesia	With epidural analgesia	<i>P</i> value (Fisher's exact test)	Odds ratio*
NICU admission (%)	4.6	8.2	<i>P</i> =0.003	1.78 [1.24–2.57]
Resuscitation				1.62 [1.37–1.92]
Basic (%)	17.3	27.7	<i>P</i> ≤ 0.0001	
Advanced (%)	0.3	1.0	<i>P</i> ≤ 0.0001	
Early onset of breast feeding (%)	91.1	82.4	<i>P</i> ≤ 0.0001	1.96 [1.55–2.47]

\* 95% Confidence interval.

6. [Herrera-Gómez A](#), [García-Martínez O](#), [Ramos-Torrecillas J](#), [De Luna-Bertos E](#), [Ruiz C](#), [Ocaña-Peinado FM](#). 2015. Retrospective study of the association between epidural analgesia during labour and complications for the newborn. [Midwifery](#). [Epub ahead of print]





## Maternal and Neonatal Outcomes of Elective Induction of Labor

< Pre

*Evidence Reports/Technology Assessments, No. 176*

Investigators: Aaron B Caughey, MD, MPP, MPH, PhD, Vandana Sundaram, MPH, Anjali J Kaimal, MD, Yvonne W Cheng, MD, MPH, Allison Gienger, BA, Sarah E Little, MD, Jason F Lee, MPH, Luchin Wong, MD, MPH, Brian L Shaffer, MD, Susan H Tran, MD, Amy Padula, MPH, Kathryn M McDonald, MM, Elisa F Long, PhD, Douglas K Owens, MD, MS, and Dena M Bravata, MD, MS.

Rockville (MD): [Agency for Healthcare Research and Quality \(US\)](#); 2009 Mar.

Report No.: 09-E005

### Conclusions:

Randomized controlled trials suggest that elective induction of labor at 41 weeks of gestation and beyond may be associated with a decrease in both the risk of cesarean delivery and of meconium-stained amniotic fluid. The evidence regarding elective induction of labor prior to 41 weeks of gestation is insufficient to draw any conclusion. There is a paucity of information from prospective RCTs examining other maternal or neonatal outcomes in the setting of elective induction of labor. Observational studies found higher rates of cesarean delivery with elective induction of labor, but compared women undergoing induction of labor to women in spontaneous labor and were subject to potential confounding bias, **particularly from gestational age**. Such studies do not inform the question of how elective induction of labor affects maternal or neonatal outcomes. Elective induction of labor at 41 weeks of gestation and potentially earlier also appears to be a cost-effective intervention, but because of the need for further data to populate these models our analyses are not definitive. Despite the evidence from the prospective, RCTs reported above, there are concerns about the translation of such findings into actual practice, thus, there is a great need for studying the translation of such research into settings where the majority of obstetric care is provided.

7. Caughey AB et al. 2009. Maternal and Neonatal Outcomes of Elective Induction of Labor Rockville (MD): [Agency for Healthcare Research and Quality \(US\)](#).

# Le criticità del caso

Viene effettuato il pelle a pelle

Il neonato non si attacca nelle prime ore

La donna è stanca, ha cefalea

La donna non tiene con sé il neonato 24 su 24  
(lascia il neonato al nido di notte)

# Strategie

- Il sostegno a questa donna dovrà essere: intensivo;
- valorizzare la motivazione ad allattare;
- aiutare la donna a trovare possibili atteggiamenti corporei per l'allattamento al seno, nonostante la stanchezza e la cefalea