



**VŠEOBECNÁ FAKULTNÍ
NEMOCNICE V PRAZE**



**1. LÉKAŘSKÁ
FAKULTA**
Univerzita Karlova

Perinatální deprese

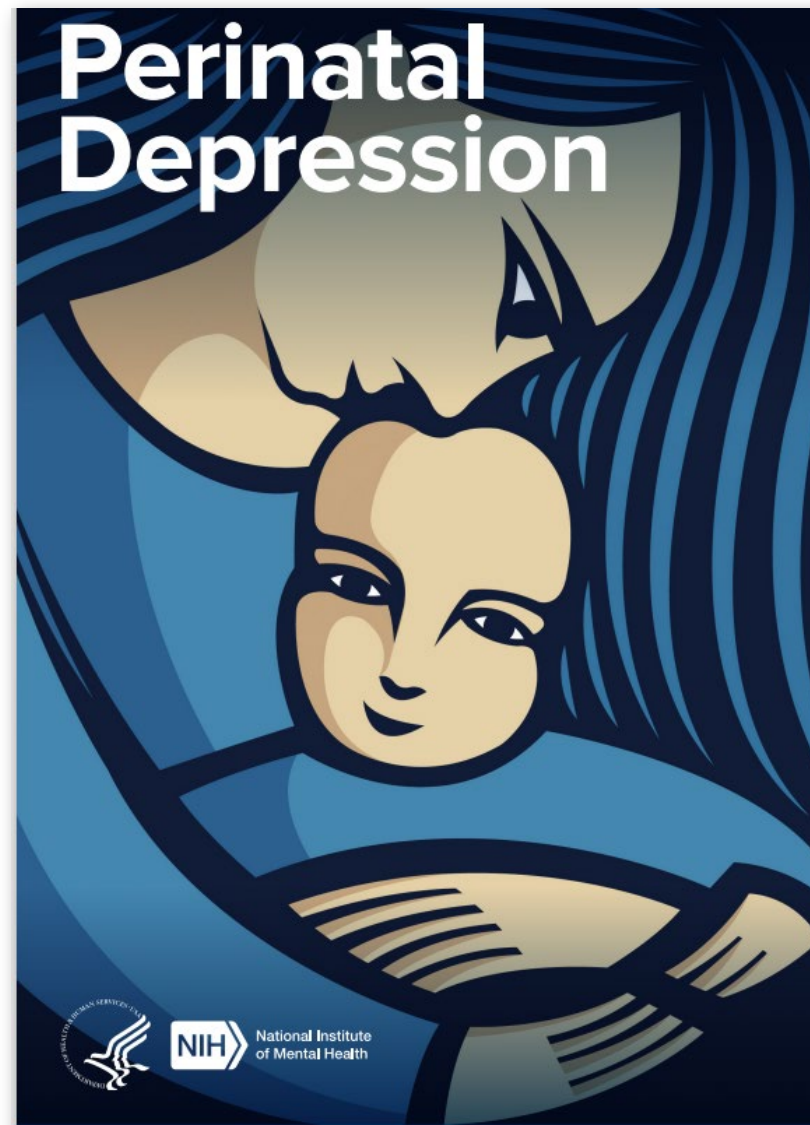
Pavλίna Nosková, KARIM VFN a 1. LF UK



Definice

(Diagnostic and Statistic Manual of Mental Disorders)

- Depresivní epizoda, která se objeví během gravidity nebo v průběhu 4 týdnů po porodu
- Antepartální deprese
- Postpartální deprese
- 9,7-23,5 % těhotných
- věk ≤ 19 let, kuřačky, Indiánky, úmrtí po porodu



Následky perinatální deprese

Antepartálně

- Zvýšené riziko předčasných porodů
- Zvýšené riziko potratů
- Zvýšené riziko porodních komplikací
- Riziko abuzu, malnutrice
- Plod matky s neléčenou depresí → změny metylace DNA, ↑ motorika, variabilita srdeční frekvence

Postpartálně

- Narušení rodinných a partnerských vztahů
- Opožděný kognitivní vývoj dětí
- Zvýšená míra psychopatologie dětí



Mateřská mortalita a suicidium

- Světová prevalence:
680/100 000 antenatálně
210/100 000 postnatálně do 1r
- Vyšší prevalence v 1.trimestru

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SEX AND GENDER ISSUES IN BEHAVIORAL HEALTH (L HANTSOO AND S NAGLE-
YANG, SECTION EDITORS)



Suicide and Maternal Mortality

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Abstract

Purpose of Review Suicide is a leading cause of death in the perinatal period (pregnancy and 1 year postpartum). We review recent findings on prevalence, risk factors, outcomes, and prevention and intervention for suicide during pregnancy and the first year postpartum.

Recent Findings Standardization of definitions and ascertainment of maternal deaths have improved identification of perinatal deaths by suicide and risk factors for perinatal suicide. Reports of a protective effect of pregnancy and postpartum on suicide risk may be inflated. Clinicians must be vigilant for risk of suicide among their perinatal patients, especially those with mental health diagnoses or prior suicide attempts.

Summary Pregnancy and the year postpartum are a time of increased access to healthcare for many, offering many opportunities to identify and intervene for suicide risk. Universal screening for suicide as part of assessment of depression and anxiety along with improved access to mental health treatments can reduce risk of perinatal suicide.



Příčiny perinatální deprese

Změny v graviditě

- Estrogen-progesteron
- Hypothalamus-hypofýza (CRH-kortikoliberin)
- Přijetí těhotenství
- Fyzické změny 1.trim
- Emocionální složka
- Stresová zátěž
- Laktace

Patofyziologie

- Genetická zátěž
- Teorie zánětu

Rizikové faktory

- Stres
- Úzkostná porucha
- ↓ podpora partnera
- ↓ sociální podpora
- Domácí násilí
- Nechtěná gravidita
- ↓ socioekonomický status



Klinické projevy

Podrážděnost

Pocit smutku

Výrazná únava

Potíže se spánkem

Pocit marnosti

Pocit zoufalství



Nezájem o dítě

Pocit nezvládnání
péče o dítě

Ztráta
dřívějších zájmů



Baby blues

- Depresivní epizoda 3.-10.den po porodu
- 50-80 % žen, hormonální změny, laktace
- Úzkost, podrážděnost, plačtivost
- Poruchy spánku, únava
- **Nad 2 týdny → postpartální deprese**





BABY BLUES SYNDROME

If you feel sad or moody in the first few days after having your baby, you may be having the baby blues. In general this condition is still considered normal, because it is experienced by 70 - 80% of postpartum mothers.

Symptoms

- Poor concentration
- Moody
- Crying without reason
- Anxiety
- Insomnia

Causes

- Drastic hormonal changes
- Fatigue after giving birth and breastfeeding
- Sudden changes in routine caring for baby
- Lack of support from husband or family
- Transition to being a mother

What You Can Do About The Baby Blues

Talk to your partner and ask help from him

Always stay active. This could really boost your mood

Don't forget to pamper yourself. You deserve it

Spend some time outside of the house

Get as much sleep as you can

Baby blues usually go away by themselves within a week or two of giving birth. You don't need medical treatment for baby blues. But if your sad feeling last longer than 2 weeks, tell your health care provider.

Produced by Dr Jeanrette J Nierras from Doc2Us.
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MIND JOURNAL

BABY BLUES SYNDROME

A. Baby blues, also known as postpartum blues (PPB) is a common, temporary psychological state, predominated by feelings of sadness, which occurs right after childbirth. The condition typically lasts for 1 to 2 weeks after delivery.

B. Prevalence Of Baby Blues

- 58.5% of women tend to suffer from PPB after giving birth
- 20% of women with PPB may develop PPD
- 60–80% of all new mothers suffer from the PPB or baby blues which rarely requires professional treatment.

C. Symptoms

- Trouble sleeping or insomnia
- Feeling unattached with child
- Overly worried about the child's health
- Uncontrollable crying over a small issue
- Mood swings
- Uncontrollable crying

D. Causes

- Family history of postpartum depression
- Higher volume of lifetime pregnancies
- History of premenstrual depression
- Degree of depressive symptoms while pregnant
- Mood fluctuations linked with pregnancy
- History of mood changes associated with the menstrual cycle

E. How to overcome Baby Blues

1. Take Rest

2. Body Care

3. Outdoor Time

4. Seek Help

5. Join Support Groups

MIND HELP





Poporodní psychóza

Čech et al 2014

Amentní forma

- Dezorientace
- Bludy
- Halucinace
- Neklid
- Náhlý začátek

Manická forma

- Euforie
- Pocity štěstí
- Megalomanie
- Možný přechod do amence

Endogenní depresivní a schizofrenní forma

- Plačtivost
- Ranní apatie
- Poruchy laktace
- Pocity bezmoci
- Paranoia
- Neschopnost péče

0,1% na všechny porody, 10% u předchozí psychiatrické anamnézy, vždy nutná hospitalizace



Postpartální psychické poruchy - souhrn

Tab. 2 Diferenciální diagnostika nejčastějších poporodních psychických poruch; podle [21]

	Poporodní blues	Poporodní deprese	Poporodní psychóza
Příznaky	Úzkost týkající se novorozence a rodičovství, plačtivost, zahlcenost emocemi, emoční labilita	Pokleslá nálada, vysoká úzkost, zahlcenost emocemi, pocity beznaděje, sebevražedné myšlenky	Tenze, labilní, pokleslá nebo elevovaná nálada, obavy, bludy a halucinace
Počátek	Do 10 dnů po porodu	Do 4 týdnů po porodu	Akutní začátek, první 2-3 týdny po porodu
Důsledky	Proměnlivé postižení, občas dobré dny, nálada nemusí být pokleslá po celou dobu	Pokleslá nálada a zneschopnění po většinu času	Může se rychle zhoršit, akutní stav
Průběh	Zpravidla odezní během 1-2 týdnů	Incidence stoupá prvních 30 dnů, může trvat měsíce	Proměnlivý
Rizika	Přechod do deprese	Suicidium, zanedbávání péče o novorozence, narušená mateřská vazba, psychotické symptomy	Může ublížit sobě nebo novorozenci z psychotické motivace, nutnost hospitalizace



Diagnostika perinatální deprese

Edinburgh Postnatal Depression Scale¹ (EPDS)

Name: _____ Address: _____

Your Date of Birth: _____

Baby's Date of Birth: _____ Phone: _____

As you are pregnant or have recently had a baby, we would like to know how you are feeling. Please check the answer that comes closest to how you have felt **IN THE PAST 7 DAYS**, not just how you feel today.

Here is an example, already completed.

I have felt happy:

- Yes, all the time
 Yes, most of the time This would mean: "I have felt happy most of the time" during the past week.
 No, not very often Please complete the other questions in the same way.
 No, not at all

In the past 7 days:

- | | |
|--|--|
| <p>1. I have been able to laugh and see the funny side of things</p> <p><input type="checkbox"/> As much as I always could
 <input type="checkbox"/> Not quite so much now
 <input type="checkbox"/> Definitely not so much now
 <input type="checkbox"/> Not at all</p> <p>2. I have looked forward with enjoyment to things</p> <p><input type="checkbox"/> As much as I ever did
 <input type="checkbox"/> Rather less than I used to
 <input type="checkbox"/> Definitely less than I used to
 <input type="checkbox"/> Hardly at all</p> <p>*3. I have blamed myself unnecessarily when things went wrong</p> <p><input type="checkbox"/> Yes, most of the time
 <input type="checkbox"/> Yes, some of the time
 <input type="checkbox"/> Not very often
 <input type="checkbox"/> No, never</p> <p>4. I have been anxious or worried for no good reason</p> <p><input type="checkbox"/> No, not at all
 <input type="checkbox"/> Hardly ever
 <input type="checkbox"/> Yes, sometimes
 <input type="checkbox"/> Yes, very often</p> <p>*5. I have felt scared or panicky for no very good reason</p> <p><input type="checkbox"/> Yes, quite a lot
 <input type="checkbox"/> Yes, sometimes
 <input type="checkbox"/> No, not much
 <input type="checkbox"/> No, not at all</p> | <p>*6. Things have been getting on top of me</p> <p><input type="checkbox"/> Yes, most of the time I haven't been able to cope at all
 <input type="checkbox"/> Yes, sometimes I haven't been coping as well as usual
 <input type="checkbox"/> No, most of the time I have coped quite well
 <input type="checkbox"/> No, I have been coping as well as ever</p> <p>*7. I have been so unhappy that I have had difficulty sleeping</p> <p><input type="checkbox"/> Yes, most of the time
 <input type="checkbox"/> Yes, sometimes
 <input type="checkbox"/> Not very often
 <input type="checkbox"/> No, not at all</p> <p>*8. I have felt sad or miserable</p> <p><input type="checkbox"/> Yes, most of the time
 <input type="checkbox"/> Yes, quite often
 <input type="checkbox"/> Not very often
 <input type="checkbox"/> No, not at all</p> <p>*9. I have been so unhappy that I have been crying</p> <p><input type="checkbox"/> Yes, most of the time
 <input type="checkbox"/> Yes, quite often
 <input type="checkbox"/> Only occasionally
 <input type="checkbox"/> No, never</p> <p>*10. The thought of harming myself has occurred to me</p> <p><input type="checkbox"/> Yes, quite often
 <input type="checkbox"/> Sometimes
 <input type="checkbox"/> Hardly ever
 <input type="checkbox"/> Never</p> |
|--|--|

Administered/Reviewed by _____ Date _____

¹Source: Cox, J.L., Holden, J.M., and Sagovsky, R. 1987. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry* 150:782-786 .

²Source: K. L. Wisner, B. L. Parry, C. M. Piontek, Postpartum Depression N Engl J Med vol. 347, No 3, July 18, 2002, 194-199

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Edinburgh Postnatal Depression Scale¹ (EPDS)

Postpartum depression is the most common complication of childbearing.² The 10-question Edinburgh Postnatal Depression Scale (EPDS) is a valuable and efficient way of identifying patients at risk for "perinatal" depression. The EPDS is easy to administer and has proven to be an effective screening tool.

Mothers who score above 13 are likely to be suffering from a depressive illness of varying severity. The EPDS score should not override clinical judgment. A careful clinical assessment should be carried out to confirm the diagnosis. The scale indicates how the mother has felt **during the previous week**. In doubtful cases it may be useful to repeat the tool after 2 weeks. The scale will not detect mothers with anxiety neuroses, phobias or personality disorders.

Women with postpartum depression need not feel alone. They may find useful information on the web sites of the National Women's Health Information Center <www.4women.gov> and from groups such as Postpartum Support International <www.chss.iup.edu/postpartum> and Depression after Delivery <www.depressionafterdelivery.com>.

SCORING

QUESTIONS 1, 2, & 4 (without an *)

Are scored 0, 1, 2 or 3 with top box scored as 0 and the bottom box scored as 3.

QUESTIONS 3, 5-10 (marked with an *)

Are reverse scored, with the top box scored as a 3 and the bottom box scored as 0.

Maximum score: 30
 Possible Depression: 10 or greater
 Always look at item 10 (suicidal thoughts)

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Instructions for using the Edinburgh Postnatal Depression Scale:

- The mother is asked to check the response that comes closest to how she has been feeling in the previous 7 days.
- All the items must be completed.
- Care should be taken to avoid the possibility of others. (Answers come from the mother only)
- The mother should complete the scale herself with reading.



perinatology.com
Edinburgh Postnatal Depression Scale (EPDS)

¹Source: Cox, J.L., Holden, J.M., and Sagovsky, R. 1987. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry* 150:782-786 .

²Source: K. L. Wisner, B. L. Parry, C. M. Piontek, Postpartum Depression N Engl J Med vol. 347, No 3, July 18, 2002, 194-199



Diagnostika peripartální deprese

Tab. 1 Edinburská škála perinatální deprese

Nyní před sebou máte několik otázek a prosíme Vás, abyste u každé zvolila tu odpověď, která nejlépe vyjadřuje, jak jste se cítila v posledním týdnu. Nejde tedy o to, jak se cítíte právě v tento okamžik, ale o přibližnou hodnotu, jak jste se cítila v průběhu posledního týdne.
1. Byla jsem veselá a viděla převážně veselé stránky života.
2. Hleděla jsem do budoucnosti s radostí a nadějí.
3. Nepřiměřeně jsem se na sebe zlobila a vyčítala si, když se něco nedařilo.
4. Byla jsem úzkostná a ustaraná, aniž by k tomu byly rozumné důvody.
5. Cítila jsem se vyděšená, až trochu v panice, a to bez vážných důvodů.
6. Mnoho věcí se mě nepříjemně dotýkalo.
7. Byla jsem tak znepokojená, že jsem špatně spala.
8. Měla jsem špatnou a mizernou náladu.
9. Byla jsem tak nešťastná, že jsem plakala.
10. Napadaly mě myšlenky, které mě znepokojovaly.

Odpovědi: Ano, většinu času (3 body); Ano, častěji než jindy (2 body); Ano, ale jen výjimečně (1 bod); Ne nikdy (0 bodů).
Celkovém skóre ≥ 13 odpovídá vyšším riziku poporodní deprese a je vhodné provést psychiatrické vyšetření k bližšímu určení stavu. Otázky: 1, 2 a 4 jsou bodovány reverzně.
Upraveno podle: Cox, J.L., Holden, J.M., Sagovsky, R. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. Brit J Psychiat, 1987, 150, p. 782-786.

PŘEHLEDOVÝ ČLÁNEK

Etiologie, rizikové faktory a metody prevence poporodní deprese

Etiology, risk factors, and methods of postpartum
depression prevention

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Národní ústav duševního zdraví, Klecany, primář prof. MUDr. P. Mohr, Ph.D.



Léčba antepartální deprese

Psychofarmaka během těhotenství – mírní, nebo zvyšují riziko pro plod? Část první: antidepresiva, antipsychotika

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V současnosti můžeme pozorovat rostoucí trend preskripce psychofarmak u žen ve fertilním věku, také se zvyšuje i počet těch, které užívají tyto přípravky přímo během těhotenství. Hlavními skupinami psychoaktivních léků používaných v psychiatrii jsou antidepresiva, antipsychotika, stabilizátory nálady a anxiolytika. Psychofarmaka, avšak i neléčené psychiatrické onemocnění, představují rizikový faktor pro ohrožení průběhu těhotenství, vývoje plodu a horší poporodní adaptaci exponovaného novorozence. V přehledu shrnujeme aktuální publikované údaje o efektu neléčené deprese a užívání antidepresiv i neléčených psychotických poruch a užívání antipsychotik na průběh těhotenství, vývoj plodu a časnou poporodní adaptaci novorozence. Dle dostupných studií nemají antidepresiva a antipsychotika teratogenní potenciál a také nezvyšují, klinicky významně, riziko pro rozvoj těhotenských komplikací a narušení vývoje plodu. Avšak se zdá, že po jejich expozici roste riziko vývoje novorozeneckého syndromu z vysazení, který komplikuje časnou adaptaci dítěte. Nicméně rizika pro plod, která s sebou nesou těžká neléčená deprese a psychotické poruchy v těhotenství, jsou závažnější než rizika spojená s užíváním antidepresiv a antipsychotik matkou během těhotenství.

Klíčová slova: antidepresiva, antipsychotika, deprese, psychóza, těhotenství, riziko.



Psychofarmaka během těhotenství – mírní, nebo zvyšují riziko pro plod? Část druhá: stabilizátory nálady, anxiolytika

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V současnosti roste počet žen, které musí v období gravidity pravidelně užívat psychofarmaka z důvodu duševního onemocnění. Většina psychofarmak přechází přes placentu do oběhu plodu, a tak mohou ovlivňovat jeho vývoj. Nicméně i neléčené duševní onemocnění v těhotenství představuje rizikový faktor pro narušení průběhu gravidity, vývoje plodu a horší poporodní adaptaci novorozence. V přehledu shrnujeme aktuální publikované údaje o efektu neléčené bipolární afektivní poruchy a užívání stabilizátorů nálady i neléčených úzkostných poruch a užívání anxiolytik na průběh těhotenství, vývoj plodu a časnou poporodní adaptaci novorozence. Dle dostupných studií mají některé stabilizátory nálady jasně prokázaný teratogenní efekt a neměly by být v těhotenství předepisovány. Avšak například u lithia byl názor na jeho negativní efekt na plod revidován. Rizika pro plod, která s sebou nese neléčená bipolární afektivní porucha v graviditě, se zdají být vysoká. Ošetřující psychiatr by měl po dobu těhotenství pacientku léčit pomocí lithia či některých nových (atypických) antipsychotik. Anxiolytika jako skupina nemají jasně prokázaný teratogenní efekt.



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Antidepresiva a gravidita

Teratogenita: valproát, karbamazepin, lithium, pregabalin

SSRI, SNRI, TCA

- Není klinicky prokázána teratogenita
- Paroxetin-mírně ↑ výskyt srdečních vad
- Trp ve 3.trimestru ↑ riziko ztížené PAN
- Syndrom z vysazení (dechová tíseň, svalový třes)

Antipsychotika

- Není klinicky prokázána teratogenita
- Riziko předčasného porodu
- Riziko spont. abortu
- ↑ riziko ztížené PAN

Benzodiazepiny

- Není klinicky prokázána teratogenita
- Mohou ve větších dávkách ↑ VVV GIT
- Pravidelná trp ve 3.trim
→ hypotonie, poporodní sedace novorozence, syndrom dechové tísně, riziko ventilační podpory



Léčba postpartální deprese a laktace

Diagnostika a moderní trendy v terapii poporodní deprese Diagnostics and modern trends in therapy of postpartum depression

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ABSTRACT

Objective: To bring actual summary of knowledge about diagnostics and modern trends in therapy of postpartum depression.

Design: Review.

Setting: National Institute of Mental Health, Klecany.

Methods: Narrative review.

Results: First assessment of depressive symptoms among puerperal women can be done by screening instruments. Baby blues and postpartum psychosis must be kept in mind during the differential diagnostics of postpartum depression. Both nonpharmacological and pharmacological interventions can be used for postpartum depression treatment. As for nonpharmacological

interventions, cognitive behavioral therapy is the most evidence based one. Antidepressants from the selective serotonin reuptake inhibitor group (SSRI) are the first choice from pharmacological interventions. Parenting support is also an important component of modern care of women with postpartum depression.

Conclusion: Systematic cooperation between psychiatrist and gynecologists-obstetricians is a precondition of the effective postpartum depression treatment. The therapeutic intervention is chosen according to severity of depressive symptoms.

KEYWORDS

puerperium, postpartum depression, antidepressants, psychotherapy

SOUHRN

Cíle studie: Přinést aktuální přehled o diagnostice a moderních trendech v terapii poporodní deprese (PPD).

Typ studie: Přehledová práce.

Název a sídlo pracoviště: Národní ústav duševního zdraví, Klecany.

Metodika: Narativní přehled literatury.

Výsledky: K prvnímu zhodnocení depresivních symptomů u žen v poporodním období lze využít screeningových dotazníků. V diferenciální diagnostice PPD je nutno myslet na poporodní blues a poporodní psychózu. V terapii PPD se uplatňují nefarmakologické a farmakologické postupy. Z nefarmakologických je nejvíce

důkazů o účinnosti u kognitivně behaviorální terapie. Antidepresiva z třídy selektivních inhibitorů zpětného vychytávání serotoninu (SSRI) jsou první farmakoterapeutickou volbou. Podpora zdravého rodičovství je další důležitou složkou moderní péče o ženy s PPD.

Závěr: Předpokladem účinné terapie deprese u žen v poporodním období je systematická spolupráce psychiatrů a gynekologů-porodníků. Dle závažnosti depresivních symptomů volíme příslušné terapeutické intervence.

KLÍČOVÁ SLOVA

puerperium, poporodní deprese, antidepresiva, psychotherapie

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Čes. Gynek., 2019, 84, č. 1, s. 68-72

Tab. 3 Antidepresiva v laktaci; podle [10]

Lék	Dávka matky mg/d	Počet-pár (matka/kojenec)	Poměr (mléko/plazma)	Relativní dávka kojence (% dávky)	Bezpečný?
Sertralin	25-200	43	0,1-5,2	<0,1-3,6	ANO
Paroxetin	10-50	68	0,1-3,3	0,1-5,5	ANO
Dosulepin	25-500	32	0,8-4,5	0,1-5,0	ANO
Mirtazapin	3-120	13	0,7-2,6	0,5-4,4	ANO
Venlafaxin	75-450	12	1,6-5,2	3,5-9,2	ANO
Fluvoxamin	42-200	7	0,3-1,4	0,1-1,6	ANO
Amitriptylin	75-175	6	0,5-1,7	0,2-1,9	ANO
Clomipramin	75-150	3	0,4-3,0	0,4-4,0	ANO
Imipramin	75-200	5	1,2-2,3	0,1-7,5	ANO
Escitalopram	5-20	10	1,7-2,7	2,9-8,3	ANO
Citalopram	18-60	35	0,9 - 9,4	1,0-10,9	NE
Fluoxetin	10-80	83	0,1-6,1	0,8-16,3	NE

FDA - brexanolone, lék 1.volby pro PPD

SC v CA a riziko postpartální deprese, suicidia

Obstetric Anesthesiology

ORIGINAL CLINICAL RESEARCH REPORT

Exposure to General Anesthesia for Cesarean Delivery and Odds of Severe Postpartum Depression Requiring Hospitalization

Jean Guglielminotti, MD, PhD,* and Guohua Li, MD, DrPH*†

[See Article, p 1419](#)

BACKGROUND: Previous research suggests that, compared with regional anesthesia, general anesthesia is associated with increased odds of postoperative depressive disorders. No study has specifically evaluated the possible protective effect of neuraxial anesthesia for cesarean delivery on maternal mental health compared with general anesthesia. This exploratory study was designed to test the hypothesis that general anesthesia for cesarean delivery is associated with increased odds of severe postpartum depression (PPD) requiring hospitalization compared with neuraxial anesthesia.

METHODS: This retrospective cohort study included cesarean delivery cases performed in New York State hospitals between January 2006 and December 2013. Exclusion criteria were as follows: (1) having >1 cesarean delivery during the study period; (2) residing outside of New York State; (3) having a general anesthetic for other surgery or delivery in the previous year or in the year after the index case. The primary outcome was the occurrence of PPD, and the secondary outcomes were: (1) the composite of suicidal ideation or self-inflicted injury (ie, suicidality); (2) anxiety disorders; and (3) posttraumatic stress disorders (PTSD). Primary and secondary outcomes were identified during the delivery hospitalization and up to 1 year after delivery. Adjusted odds ratios (aORs) and 95% confidence interval (CI) of adverse psychiatric outcomes associated with general anesthesia were estimated using propensity score matching.

RESULTS: Of the 428,204 cesarean delivery cases included, 34,356 had general anesthesia (8.0%). Severe PPD requiring hospitalization was recorded in 1158 women (2.7/1000; 95% CI, 2.5–2.9); of them, 60% were identified during readmission, with a median of 164 days after discharge. Relative to neuraxial anesthesia, general anesthesia in cesarean delivery was associated with a 54% increased odds of PPD (aOR, 1.54; 95% CI, 1.21–1.95) and a 91% increased odds of suicidal ideation or self-inflicted injury (aOR, 1.91; 95% CI, 1.12–3.25). There was insufficient evidence in these data that general anesthesia was associated with anxiety disorders (aOR, 1.27; 95% CI, 0.97–1.95) or PTSD (aOR, 1.50; 95% CI, 0.59–4.17).

CONCLUSIONS: General anesthesia for cesarean delivery is associated with increased odds of severe PPD requiring hospitalization, suicidal ideation, and self-inflicted injury. If confirmed, these preliminary findings underscore the need to avoid the use of general anesthesia for cesarean delivery whenever possible, and to provide mental health screening, counseling, and other follow-up services to obstetric patients exposed to general anesthesia. (Anesth Analg 2020;131:1421–9)

Indication for General Anesthesia (n=100)

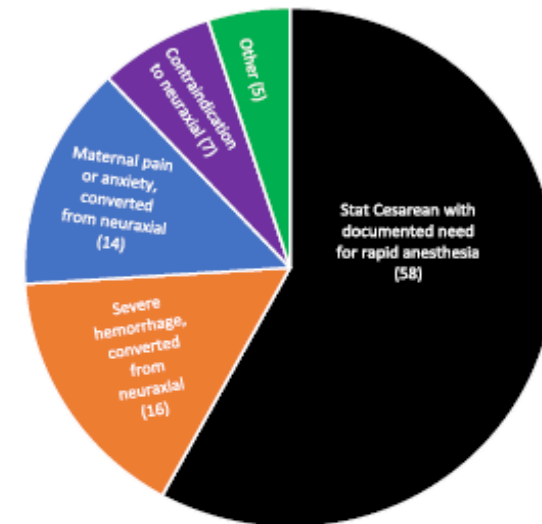


Figure. The primary indication for GA during 100 consecutive cesarean deliveries at Lucille Packard Children's Hospital in Stanford, California. Fifty-eight percent of the GA cases were category 1 (ie, threat to the life of the mother or fetus) CDs performed for indications such as fetal distress, prolapsed cord, etc. In 16% of cases, a neuraxial technique was converted to GA due to severe maternal hemorrhage (some needing hysterectomy and intensive care admission). In 14% of the cases, a neuraxial technique was converted to GA due to intraoperative maternal pain or severe anxiety. In 7% of cases, patients had a contraindication to neuraxial anesthesia including, but not limited to, a brain tumor with vasogenic edema or new diagnosis leukemia with severe thrombocytopenia. Maternal preference for GA and lack of capacity to consent due to intoxication or psychosis were documented as reasons for GA in 5% of cases. CD indicates cesarean delivery; GA, general anesthesia.

SC v CA a riziko postpartální deprese

- Opožděný kontakt
- Opožděné přísátí
- Pooperační bolest
- Strach z CA

General Anesthesia and Postpartum Depression

Table 1. Incidence of Adverse Psychiatric Maternal Outcomes Associated With General Anesthesia for Cesarean Delivery in the State Inpatient Database for New York, 2006–2013

	Neuraxial Anesthesia (N = 393,848)			General Anesthesia (N = 34,356)		
	Number	Incidence (per 1000)	95% CI	Number	Incidence (per 1000)	95% CI
Depression	1034	2.62	2.47–2.79	124	3.61	3.00–4.30
Suicidal ideation or self-inflicted injury	182	0.46	0.40–0.53	32	0.93	0.64–1.31
Anxiety	636	1.61	1.49–1.74	50	1.45	1.08–1.92
Posttraumatic stress disorder	52	0.13	0.10–0.17	... ^a	... ^a	0.06–0.38

Abbreviation: CI, confidence interval.

^aBecause of Healthcare Cost and Utilization Project data use agreement restrictions on small cell size, the number of observed cases and exact proportions are not presented.

Table 2. Proportion of Adverse Psychiatric Maternal Outcomes Identified During Readmissions and Time Elapsed Between Hospital Discharge and Readmission in the State Inpatient Database for New York, 2006–2013

Outcome	Neuraxial Anesthesia (N = 393,848)		General Anesthesia (N = 34,356)	
	Proportion	Time-to-Readmission (d) ^a	Proportion	Time-to-Readmission (d) ^a
Depression	626/1034 (60%)	125 (35–242)	76/124 (61%)	164 (64–261)
Suicidal ideation or self-inflicted injury	150/182 (82%)	180 (87–255)	21/32 (66%)	209 (127–300)
Anxiety	281/636 (44%)	140 (45–249)	22/50 (44%)	156 (27–256)
Posttraumatic stress disorder	51/52 (98%)	174 (66–283)	^b (=83%)	108 (92–276)

^aTime-to-readmission is expressed as median (interquartile range).

^bBecause of Healthcare Cost and Utilization Project data use agreement restrictions on small cell size, the number of observed cases and exact proportions are not presented.

Exposure to General Anesthesia for Cesarean Delivery and Odds of Severe Postpartum Depression Requiring Hospitalization



EDA a postpartální deprese

Journal of Pain Research Dovepress
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Open Access Full Text Article REVIEW

Childbirth Pain and Post-Partum Depression: Does Labor Epidural Analgesia Decrease This Risk?

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Abstract: Post-partum depression (PPD) is a common complication of pregnancy worldwide with a prevalence as high as 15% in some countries. Pain has been identified as a risk factor for major depression; however, the relationship between labor-related pain and PPD is less understood. This article sought out to examine the relationship between pain and PPD, examining whether there is a correlation that reducing pain through epidural analgesia can lower the risk for PPD. A PubMed database search was performed using the keywords "post-partum depression" and "labor epidural". Multiple articles including 2 meta-analyses were evaluated for the association between post-partum depression and epidural analgesia for labor. Although there is evidence supporting labor epidural analgesia reducing PPD, many studies including the meta-analyses did not uphold the hypothesis. More well-designed studies on this topic need to be investigated in order to substantiate the current evidence in the literature.

Journal of Pain Research 2021:14 1925–1933

Table 1 Studies Selected for Review

Title, Author(s), Year	Sample Size	Study Design	Main Findings
Kounanis et al 2019 "Labor epidural analgesia and the risk of postpartum depression: A meta-analysis of observational studies."	85,928	Meta-analysis 11 articles included	-No association between epidural analgesia and PPD (pooled adjusted OR 1.03, 95% CI 0.77–1.37)
Almeida et al 2020 "The Association between Labor Epidural Analgesia and Depression: A Systematic Review and Meta-Analysis."	4,442	Meta-analysis 9 articles included	-No association between epidural analgesia and PPD (OR 1.02, 95% CI, 0.62–1.66)
Hiltunen et al 2004 "Does pain relief during delivery decrease the risk of postnatal depression?"	185	Prospective follow-up study	-The adjusted risk of depressive scores during the 1st postnatal week was decreased in the epidural/paracervical group compared to deliveries without analgesia (OR 0.25, 95% CI, 0.09–0.72) -No difference at 4 months postpartum
Ding et al 2014 "Epidural Labor Anesthesia is Associated with Decreased Risk of Postpartum Depression: A Prospective cohort study".	214	Prospective cohort study	PPD was seen in 14% of women who received epidural labor analgesia and 34.6% of those without epidural (p<0.0001) -Statistically significant correlation that epidural was associated with a decreased risk of postpartum depression
Suhutharan et al 2016 "Investigating analgesic and psychological factors associated with risk of postpartum depression development: a case-control study".	479	Case control study	-68.7% of women who received epidural analgesia, the risk for PPD was significantly lower than those without an epidural: 10.0% vs 19.3% (OR 0.47, CI 0.27–0.8, P=0.0078). -Absence of epidural analgesia was associated with almost double the risk of PPD (adjusted OR 1.95, CI 1.04–3.66, P=0.0367).
Lim et al 2018 "Labor Analgesia as a Predictor for Reduced Postpartum Depression Scores: A Retrospective Observational Study".	201	Retrospective observational study	-Linear regression demonstrated an association between higher improvements in pain and lower EPDS score (r=0.025; P=0.002).
Nahirney et al 2017 "Investigating analgesic and psychological factors associated with risk of postpartum depression development: a case-control study".	479	Case control study	-Epidural use was not significantly associated with PPD. – There was a wide confidence interval (0.39–2.77) and may be masking a statistically relevant association
Wu et al 2018 "Association between Intrapartum Epidural Use and Maternal Postpartum Depression Presenting for Medical Care: a Population-based, Matched Cohort Study"	40,303	Population-based, matched cohort study	-Intrapartum epidural use was not associated with maternal postpartum physician or hospital visits or self-harm.
Sun et al 2020 "Epidural Labor Analgesia Is Associated with a Decreased Risk of the Edinburgh Postnatal Depression Scale in Trial of Labor after Cesarean: A Multicenter, Prospective Cohort Study."	423	Multicenter, prospective cohort study	-Epidural analgesia during labor was significantly associated with a decreased risk of depression at both 48 hours and 42 days after delivery for TOLAC (OR, 0.209; 95% CI, 0.096–0.429; P < 0.001) and (OR, 0.235; 95% CI, 0.113–0.469; P < 0.001)
Orbach-Zinger et al 2018 "The Relationship Between Women's Intention to Request a Labor Epidural Analgesia, Actually Delivering With Labor Epidural Analgesia, and Postpartum Depression at 6 Weeks: A Prospective Observational Study."	1326	Observational study	- No statistical difference from individuals that were diagnosed with PPD (6.6%) at 6 weeks that wanted an epidural but did not receive one versus the rest of the cohort (RD=1.8%, 95% CI, -0.03–0.07, P=0.371).

Note: This table provides an overview for the 10 various studies included in this review highlighting the heterogeneity and various findings.



EDA a postpartální deprese

Almeida et al. *BMC Women's Health* (2020) 20:99
https://doi.org/10.1186/s12905-020-00948-0

BMC Women's Health

RESEARCH ARTICLE

Open Access



The association between labor epidural analgesia and postpartum depression: a systematic review and meta-analysis

Marcela Almeida¹, Katherine A. Kosman¹, Mark C. Kendall^{2*} and Gildasio S. De Oliveira²

Abstract

Background: Previous studies have demonstrated that appropriate treatment for postoperative pain can lead to improvement in depressive symptoms, however the association between adequate intrapartum pain control and the development of postpartum depression is not clear. The purpose of the study was to examine the effects of labor epidural analgesia and postpartum depression.

Methods: We performed a quantitative systematic review in compliance with the PRISMA statement. We conducted a search of PubMed, Embase, the Cochrane Database of Systematic Reviews and Google Scholar databases. The primary outcome was a positive screen of postpartum depression among women who received labor epidural analgesia up to 3 months into the postpartum period. Meta-analysis was performed using the random effect model.

Results: Of the 148 studies available, 9 studies with 4442 patients were included in the analysis. The use of labor analgesia on positive depression screen compared to control revealed no significant effect, OR (95% CI) of 1.02 (0.62 to 1.66, $P=0.94$).

Conclusion: Based on current literature, the use of epidural analgesia for pain relief during labor doesn't appear to affect the likelihood of postpartum depression. Future studies are warranted to further investigate these findings and identify other possible preventative interventions that reduce postpartum depression.

Keywords: Labor analgesia, Postpartum depression, Maternal mental health, Systematic review

Table 1 Summary of study characteristics included in analysis

Author	Year	Design	Intervention/ Control	Recruitment	PPD Time Period	Measure of postpartum depression	Results
Ding et al. [14] Origin: China	2014	Observational; prospective cohort	107/107	Patient decided to have ELA or no pain relief at all	6 w	Edinburgh Postnatal Depression Scale (cutoff score ≥ 10)	PPD was significantly less in LEA group ($P < 0.001$)
Eckerdal et al. [15] Origin: Sweden	2019	Longitudinal cohort study	800/703	Patients recruited prior to delivery	6 w	Edinburgh Postnatal Depression Scale (cutoff score ≥ 12)	No difference between LEA and PPD
Gaillard et al. [16] Origin: France	2014	Observational	217/47	Patients recruited prior to delivery	8 w	Edinburgh Postnatal Depression Scale (cutoff score ≥ 12) Diagnostic Interview for Genetic Studies	No difference between LEA and PPD
Nahirney et al. [17] Origin: Canada	2017	Observational; prospective cohort	88/107	Patients recruited on post-delivery	6 w	Edinburgh Postnatal Depression Scale (cutoff score ≥ 10)	No difference between LEA and PPD
Orbach-Zinger et al. [18] Origin: Israel	2018	Observational; prospective	604/394	Patients recruited on post-delivery day 1	6 w	Edinburgh Postnatal Depression Scale (cutoff score ≥ 10)	No significant increase in PPD among LEA
Riazanova et al. [19] Origin: Russia	2018	Observational	107/103	Patient decided to have ELA or no pain relief at all	6 w	Edinburgh Postnatal Depression Scale (cutoff score ≥ 10)	No significant increase in PPD among LEA
Suhitharan et al. [20] Origin: USA	2016	Observational; case-control	329/150	Patients recruited in postnatal period (LEA or entonox/pethidine)	8 w	Edinburgh Postnatal Depression Scale (cutoff score ≥ 10) + DSM-IV Criteria Interview via psychiatrist	PPD was significantly less in LEA group ($P < 0.008$)
Tobin et al. [21] Origin: USA	2016	Observational; prospective secondary analysis	50/15	Medical records reviewed for LEA/no LEA	8 w	Edinburgh Postnatal Depression Scale (cutoff score ≥ 10)	Epidural analgesia did not reduce occurrence of PPD.
Zhang et al. [22] Origin: China	2018	Observational	213/301	Patients decided on 3 groups of pain relief; doula, transcutaneous electrical nerve stimulation, or epidural analgesia.	4 w	Edinburgh Postnatal Depression Scale (cutoff score ≥ 10)	Epidural analgesia did not reduce occurrence of PPD.



EDA a postpartální deprese, kulturní vlivy

Suzumori et al. *BMC Pregnancy Childbirth* (2021) 21:522
<https://doi.org/10.1186/s12884-021-03996-y>

BMC Pregnancy and Childbirth

RESEARCH

Open Access

Relationship between delivery with anesthesia and postpartum depression: The Japan Environment and Children's Study (JECS)

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Abstract

Background: Postpartum depression is one of the most commonly experienced psychological disorders for women after childbirth, usually occurring within one year. This study aimed to clarify whether women with delivery with anesthesia, including epidural analgesia, spinal-epidural analgesia, and paracervical block, had a decreased risk of postpartum depression after giving birth in Japan.

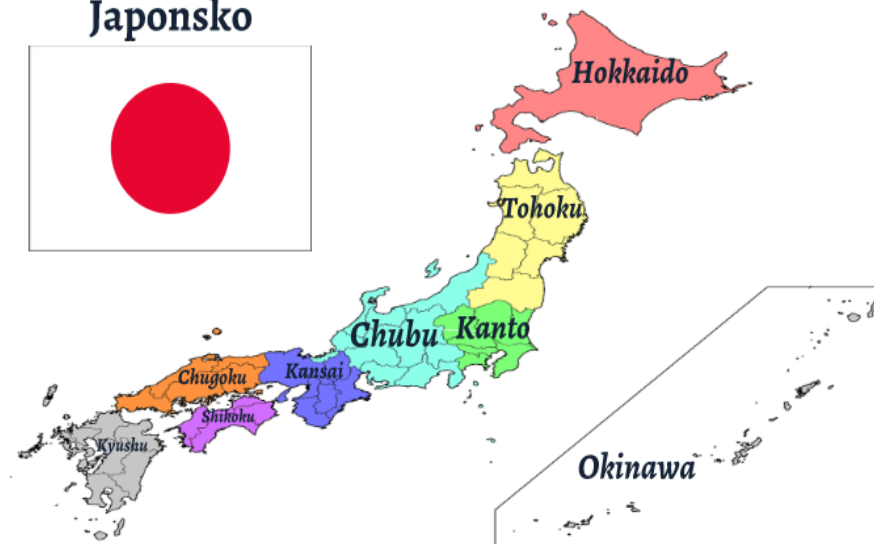
Methods: The Japan Environment and Children's Study (JECS) was a prospective cohort study that enrolled registered fetal records (n = 104,065) in 15 regions nationwide in Japan. Binomial logistic regression analyses were performed to calculate the adjusted odd ratios (aORs) for the association between mode of delivery with or without anesthesia and postpartum depression at one-, six- and twelve-months after childbirth.

Results: At six months after childbirth, vaginal delivery with anesthesia was associated with a higher risk of postpartum depression (aOR: 1.233, 95% confidence interval: 1.079–1.409), compared with vaginal delivery without analgesia. Nevertheless, the risk dropped off one year after delivery. Among the pregnant women who requested delivery with anesthesia, 5.1% had a positive Kessler-6 scale (K6) score for depression before the first trimester ($p < 0.001$), which was significantly higher than the proportions in the vaginal delivery without analgesia (3.5%).

Conclusions: Our data suggested that the risk of postpartum depression at six months after childbirth tended to be increased after vaginal delivery with anesthesia, compared with vaginal delivery without analgesia. Requests for delivery with anesthesia continue to be relatively uncommon in Japan, and women who make such requests might be more likely to experience postpartum depressive symptoms because of underlying maternal environmental statuses.

Keywords: Anesthesia, Depression, Delivery, EPDS, Postpartum

Japonsko



Porodní bolest formuje silný mateřský instinkt

Oxytocin a postpartální deprese



Zastánci placentofagie: „vysoký obsah oxytocinu v konzumované placentě chrání před rozvojem PPD“



Oxytocin a postpartální deprese

Psychoneuroendocrinology 120 (2020) 104793



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Oxytocin and postpartum depression: A systematic review

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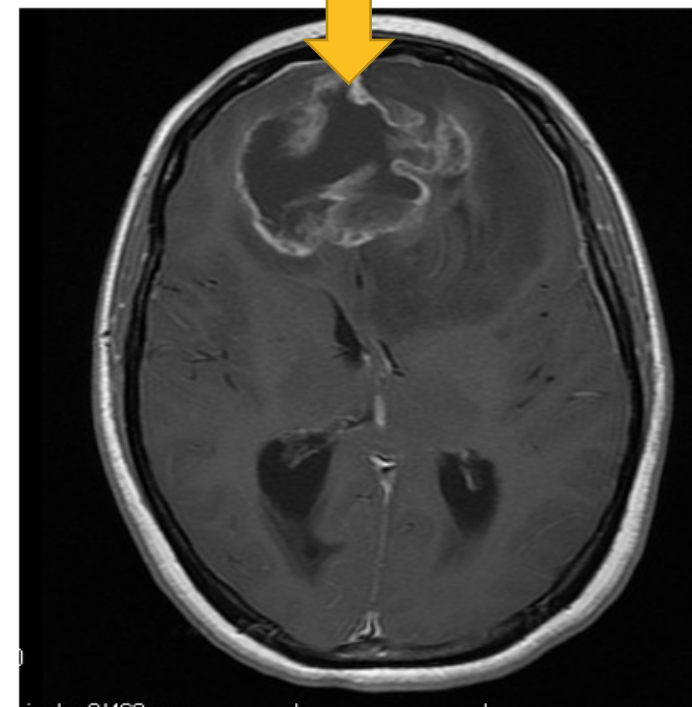
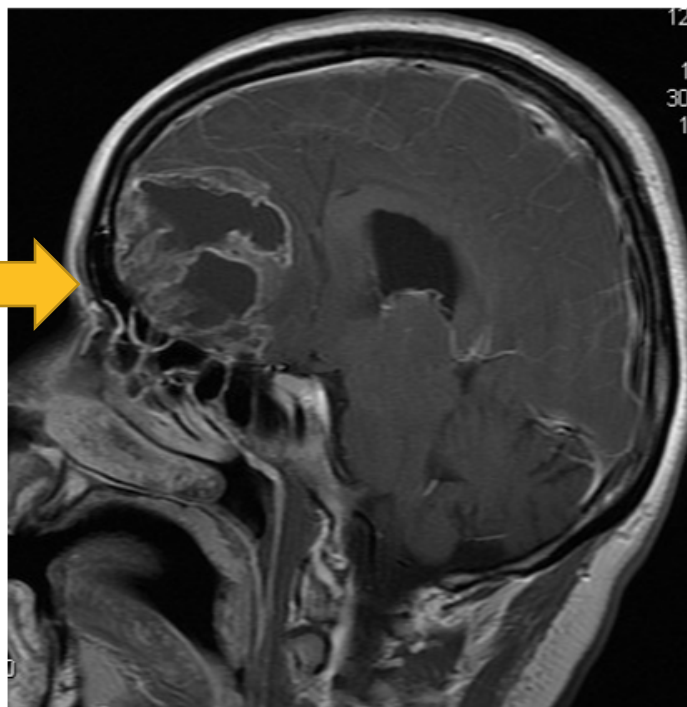
^e Silvio O. Conte Center for Oxytocin and Social Cognition, Center for Translational Social Neuroscience, Department of Psychiatry and Behavioral Sciences, Yerkes National Primate Research Center, Emory University, Atlanta, GA 30329, USA

In conclusion, the state of the literature is not of sufficient quality to make any conclusions with regard to an association between endogenous OT concentrations or synOT administration, and PPD. Based on the limitations of the current literature, and the current clinical prevalence of synOT administration, we strongly recommend that rigorous studies examining synOT exposure on PPD should be performed.

The studies should take into account a variety of exposure variables including route of exposure, total dosage, and total time of exposure. When conducting that work, we recommend continuing to utilize consistent, reliable and validated methods including the EPDS as a depression measure, controlling for breastfeeding status and history of depression and, if quantifying OT blood levels, utilizing extracted plasma and ensuring sample collection is standardized around breastfeeding occurrences.

Kazuistika

Zhoubný inoperabilní tumor
čelních laloků, vs glioblastom



34. tý grav hebd, poslední 2 tý zhoršení úzkosti, pospává, nemá chuť k jídlu a pití + zvracení, fotofobie, 30.3. překlad ad GPK, zhoršení vědomí, CT, SC, ad ÚVN (MR), 11.4. exitus

CAVE dg. změny chování v těhotenství



Perinatální deprese a anesteziolog

- Empatický přístup a komunikace
- Předanestetické vyšetření a pohovor před SC
- Pečlivá anamnéza z hlediska anesteziologických komplikací v minulosti
- Preference RA u SC
- Preference volby anestezie pacientkou, pokud nejsou zdravotní omezení
- Důraz na pooperační analgezií
- Využití všech metod periporodní analgezie
- Přístup u pacientek s mrtvým plodem nebo úmrtím dítěte po porodu
- Podpora psychiky a komunikace v případě komplikací (PDPH, PŽOK)



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*Mateřství je krásné,
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i těžké chvíle...*





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