FAKULTNÍ NEMOCNICE BRNO
A LÉKAŘSKÁ FAKULTA
MASARYKOVY UNIVERZITY

KLINIKA DĚTSKÉ
ANESTEZIOLOGIE
A RESUSCITACE

Celková anestezie u císařského řezu v roce 2018

Martina Kosinová (Brno)

FAKULTNÍ NEMOCNICE BRNO

MUNI MED

- **Search:** (((cesarean[Title/Abstract]) OR caesarean[Title/Abstract])) AND (((general anesthesia[Title/Abstract]) OR general anaesthesia[Title/Abstract]) AND ("2018/01/01"[PDat] : "2018/12/31"[PDat]))
- 79 článků
- 7 review

- Většina:
  - Case reporty
  - National surveys
  - Publikace komplikací svodné anestezie
  - Observační studie rodiček specifických skupin/ komorbidit

Residenti a porodnická anestezie

J Educ Perioper Med. 2018 Apr 1;20(2):E621. eCollection 2018 Apr-Jun.

Development of a Multiple-Choice Test for Novice Anesthesia Residents to Evaluate Knowledge Related to Management of General Anesthesia for Urgent Cesarean Delivery.

Lee AJ, Goodman SR, Banks SE, Lin M, Landau R.

Abstract

BACKGROUND: Teaching trainees the knowledge and skills to perform general anesthesia (GA) for cesarean delivery (CD) requires innovative strategies, as they may never manage such cases in training. We used a multistage design process to create a criterion-referenced multiple-choice test as an assessment tool to evaluate CA1's knowledge related to this scenario.

METHODS: Three faculty created 33 questions, categorized as: (1) physiologic changes of pregnancy (PCP), (2) pharmacology (PHA), (3) anesthetic implications of pregnancy (AIP), and (4) crisis resource management principles (CRM). A Delphi process (3 rounds) provided content validation. In round 1, experts (n = 15) ranked questions on a 7-point Likert scale. Questions ranked ≥ 5 in importance by ≥ 70% of experts were retained. Five questions were eliminated, several were revised, and 1 added. In round 2, consensus (N = 14) was reached in all except 7 questions. In round 3 (N = 14), all questions stabilized. A pilot test of the 29-question instrument evaluating internal consistency, reliability, convergent validity, and item analysis was conducted with the July CA1 classes at our institution after a lecture on GA for CD (n = 26, "instructed group") and another institution with no lecture (n = 26, "uninstructed group"), CA2s (N = 17), and attendings (N = 10).

RESULTS: Acceptable internal consistency and reliability was demonstrated (ρ = 0.67). Convergent validity coefficients between the CA1 uninstructed and instructed group suggested theoretical meaningfulness of the 4 sub-scales: PCP correlated at 0.29 with PHA, 0.35 with CRM, and 0.25 with AIP. PHA correlated with CRM and AIP at 0.23 and 0.28, respectively. The correlation between CRM and AIP was 0.29.

CONCLUSION: The test produces moderately reliable scores to assess CA1s' knowledge related to GA for urgent CD.

Residenti a porodnická anestezie

33 otázek

1. Fyziologické změny v těhotenství
2. Farmakologie
3. Dopady těhotenství na anestezii
4. Principy managementu a krizových situací

Sledovány 3 skupiny:

- Edukovaná skupina rezidentů
- Rezidenti bez lekce porodnické anestezie
- Skupina starších residentů a „attending anesthesiologists“

Předoperační postupy
– premedikace?

Benzodiazepiny – vhodné u rodiček s výraznou anxietou

Midazolam 0.025 mg/kg i.v. před vstupem na OS vede s snížení anxiety, nevede k ovlivnění novorozence (APGAR, NACS)

ELSEVIER

REVISTA BRASILEIRA DE ANESTESIOLOGIA

Official Publication of the Brazilian Society of Anesthesiology
www.sba.com.br

SPECIAL ARTICLE

Premedication with midazolam prior to caesarean section has no neonatal adverse effects☆

Ahmet Can Senel*, Fatih Mergan

August 2012

ARTICLE HISTORY
Received 17 March 2018
Revised 8 June 2018
Accepted 8 June 2018

KEYWORDS
Anxiety; cesarean section; general anesthesia; pain; spinal anesthesia

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Effects of preoperative anxiety on postcesarean delivery pain and analgesic consumption: general versus spinal anesthesia

Table 2 of 2

Table 2. Comparison of analgesic consumption and pain intensity in the patients with and without a State Anxiety Index score of ≥45.

	State Anxiety Inventory Score <45			State Anxiety Inventory Score ≥45		
	General anesthesia (Group 1) ($n = 59$)	Spinal anesthesia (Group 2) ($n = 62$)	p	General anesthesia (Group 1) ($n = 21$)	Spinal anesthesia (Group 2) ($n = 18$)	p
Diclofenac consumption (mg)	150 (0–150)	150 (0–225)	.270	150 (0–150)	150 (0–150)	.490
Pethidine consumption (mg)	0 (0–100)	0 (0–100)	.605	0 (0–100)	0 (0–100)	.837
VAS 1 h	4.03 ± 1.88	3.43 ± 2.36	.114	4.58 ± 1.69	2.87 ± 1.55	.016*
VAS 6 h	3.85 ± 2.11	3.25 ± 1.54	.065	3.83 ± 1.68	2.82 ± 1.41	.034*
VAS 12 h	3.73 ± 2.13	3.60 ± 1.85	.614	3.82 ± 1.62	2.58 ± 1.38	.012*
VAS 18 h	3.00 ± 1.57	2.60 ± 1.47	.236	3.07 ± 1.15	2.83 ± 1.38	.651
VAS 24 h	2.33 ± 1.18	2.26 ± 1.15	.711	2.61 ± 1.37	2.06 ± 1.09	.148

*Statistically significant difference.

EJA

Eur J Anaesthesiol 2018; **35:**372–378

ORIGINAL ARTICLE

Dexmedetomidine as a part of general anaesthesia for caesarean delivery in patients with pre-eclampsia

A randomised double-blinded trial

Ashraf M. Eskandr, Ahmed A. Metwally, Abd-Elrahman A. Ahmed, Elham M. Elfeky, Islam M. Eldesoky, Manar A. Obada and Osama A. Abd-Elmegid

Cílem snížení stresové a hemodynamické odpovědi rodiček s preeklampsií na OTI

- Skupiny D1 a D2: infuze dexmedetomidinu 1mcg/kg (10 min) před úvodem do CA, následovaná 0.4 nebo 0.6 mcg/kg/h dexmedetomidinu
- Kontrolní skupina – FR

Sledované parametry: Krevní tlak, glykemie, hladina kortizolu, VAS, RSS, Apgar skóre, hladiny dexmedetomidinu u rodičky a novorozence…

Podání dexmedetomidinu **vedlo k hemodynamické a hormonální stabilizaci** a **nevedlo k ovlivnění novorozence**!

Obvod krku a predikce obtížné intubace?

Saudi J Anaesth. 2018 Jan-Mar;12(1):77-81. doi: 10.4103/sja.SJA_385_17.

Does neck circumference help to predict difficult intubation in obstetric patients? A prospective observational study.

Riad W[1], Ansari T[1], Shetty N[1].

	Total sample ($n=94$)	Intubation		P
		Not difficult ($n=84$)	Difficult ($n=10$)	
Mallampati classification, *n* (%)				
I	33 (35.1)	31 (36.9)	2 (20.0)	0.002
II	58 (61.7)	52 (61.9)	6 (60.0)	
III	3 (3.2)	1 (1.2)	2 (20.0)	
Mouth opening (cm)	4.50 (4.375-5.000)	4.50 (4.125-5.000)	4.5 (4.375-5.000)	0.863
Thyromental distance (cm)	8.00 (7.50-9.00)	8.00 (7.50-9.00)	8.25 (7.875-8.750)	0.876
Sternomental distance (cm)	13 (12.5-14.0)	13 (12.5-14.0)	14 (12.375-14.000)	0.481
Hyomental distance (cm)				
Neutral position	3.50 (3.00-4.00)	3.50 (3.00-4.00)	3.10 (2.500-3.775)	0.206
Extension	4.75 (4.50-5.00)	5.00 (4.50-5.00)	4.50 (4.375-5.500)	0.444
Hyomental distance ratio	1.37 (1.25-1.50)	1.365 (1.25-1.50)	1.45 (1.257-1.50)	0.276
Neck circumference	34.00 (32.375-36.000)	33.75 (32.00-35.50)	35.75 (34.75-36.625)	0.011
IDS, *n* (%)				
Negative (IDS 0)	68 (72.3)	68 (81.0)	0	0.000
Positive (IDS ≥1)	26 (27.7)	16 (19.0)	10 (100)	
IDS	0.00 (0.00-1.00)	0.00 (0.00-0.00)	6.00 (5.00-6.00)	0.000
Difficult intubation, *n* (%)	10 (10.6) 95% CI (4.29-16.99)			

Data expressed as the median (interquartile range) or number and percentage. CI: Confidence interval; IDS: Intubation difficulty scale

J Matern Fetal Neonatal Med. 2018 Jul;31(14):1873-1880. doi: 10.1080/14767058.2017.1330882. Epub 2017 Jun 8.

Surgical site infection after cesarean delivery: incidence and risk factors at a US academic institution.

Moulton LJ[1], Munoz JL[1], Lachiewicz M[2], Liu X[3], Goje O[1].

Author information

Abstract

Table 3. Multivariate analysis for patients who underwent cesarean delivery for the development of postpartum SSI.

Variable	Odds ratio	95%CI		*p* Value
Cd for labor arrest	2.39	1.631	3.504	<.0001
Preterm labor	2.753	1.263	5.998	.0108
General anesthesia	4.411	1.979	9.832	.0003
Smoking during pregnancy	1.859	1.087	3.181	.0236
Maternal asthma	1.878	1.093	3.224	.0224
Body Mass Index	1.071	1.05	1.093	<.0001

For each one unit increase of BMI, the odds of SSI = yes increase by 7%, after adjusting for other covariates. In addition, general anesthesia is associated with 4.4 (2.0, 9.8) times than the odds of SSI compared to local anesthesia, after adjusting for the covariates included in the final model.

International Journal of Obstetric Anesthesia (2017) 32, 41–47
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http://dx.doi.org/10.1016/j.ijoa.2017.05.009

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ORIGINAL ARTICLE

Neonatal effects after vasopressor during spinal anesthesia for cesarean section: a multicenter, randomized controlled trial

K. Uerpairojkit,[a] R. Anusorntanawat,[b] A. Sirisabya,[c] M. Chaichalothorn,[a]
S. Charuluxananan[a]

Podání **efedrinu**

- u plánovaného SC v SAB vede ke klinicky nevýznamné tachykardii novorozence v časném poporodním období v porovnání s phenylefrinem
- Vede k závažnější acidoze (proti phenylefrinu)
- Phenylephrine – **od 01.11.2017 dostupné v ČR**

(PHENYLEPHRINE 50 MICROGRAMS/ML)

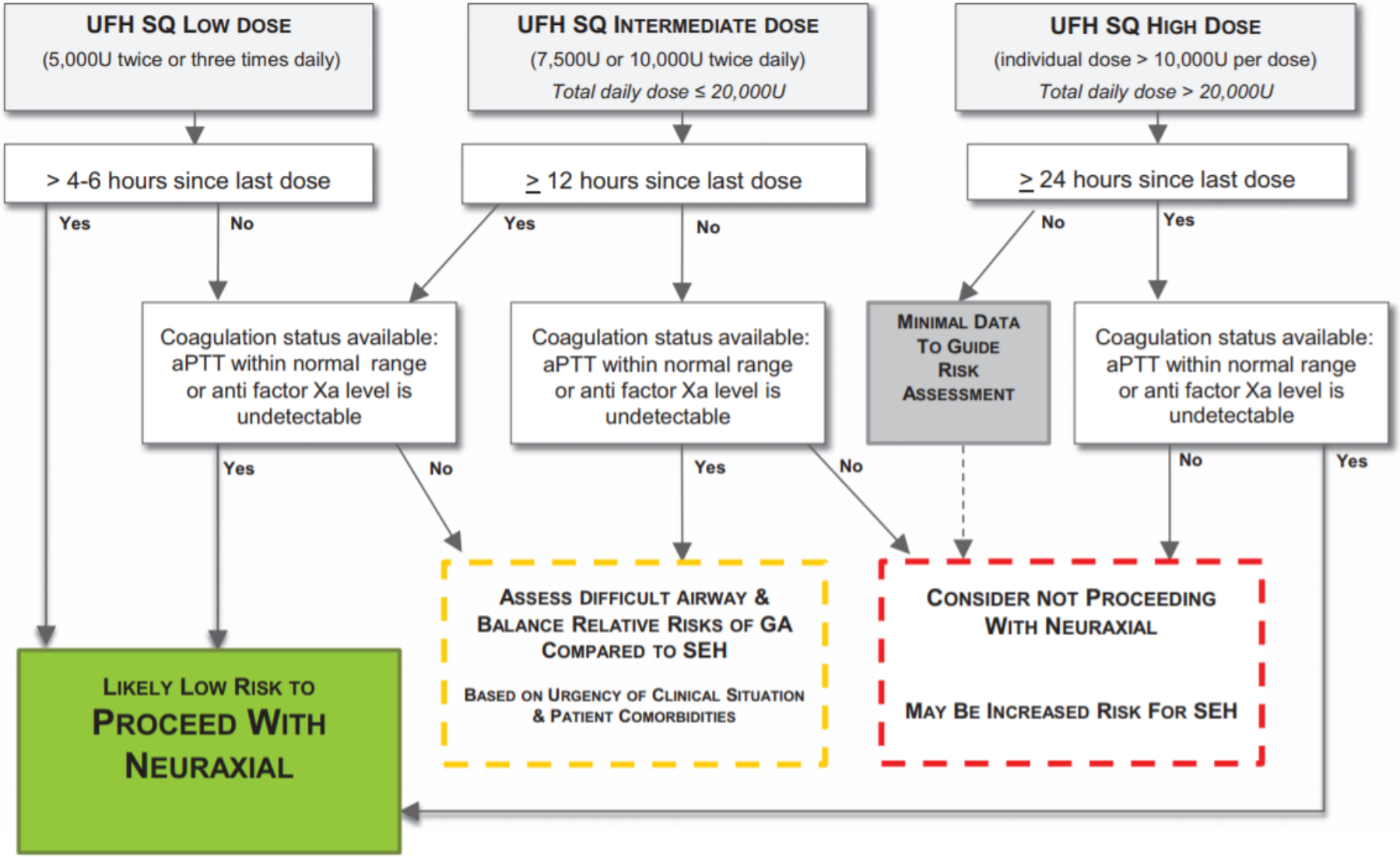


Figure 3. Decision aid for urgent or emergent neuraxial procedures in the obstetric patient receiving UFH. *Assume normal renal function, body weight > 40 kg, and no other contraindications to neuraxial anesthesia. aPTT indicates activated partial thromboplastin time; GA, general anesthesia; SEH, spinal epidural hematoma; SQ, subcutaneous; UFH, unfractionated heparin. Note: This SOAP consensus statement is not intended to set out a legal standard of care and does not replace medical care or the judgment of the responsible medical professional considering all the circumstances presented by an individual patient.

Lancet. 2018 Feb 21;3[illegible]1 Suppl 2:S33. doi: 10.1016/S0140-6736(18)30399-4. Epub 2018 Feb 21.

General versus spinal anaesthesia for caesarean section: a quasi-controlled trial.

Tafish R[1], El Aish KIA[2], Madi W[3].

Author information

Abstract

BACKGROUND: General anaesthesia and spinal anaesthesia are commonly used for caesarean sections. The aim of this study was to compare the outcomes from caesarean sections with these two types of anaesthesia.

METHODS: In this quasi-controlled trial, we enrolled women undergoing caesarean sections at Al-Helal Al-Emirati Hospital, Rafah, Gaza Strip. Women were assigned either to general anaesthesia (20% intravenous propofol for anaesthesia induction followed by atracurium for muscle relaxation, and nitrous oxide and oxygen for anaesthesia maintenance) or to spinal anaesthesia (0·5% hyperbaric solution bupivacaine with 20 μg fentanyl intrathecally). Outcome measures were length of hospital stay, length of operation, postoperative pain assessment by visual analogue scales (VAS; range 0-10, where 0 is no pain and 10 is very bad pain) 1 hour after the operation, time from anaesthesia to demand for analgesia, amount of analgesics used in 24 h, and headache after the operation. Data were analysed using SPSS version 20. Groups were compared using the Mann-Whitney U-test, Student's t test, and odds ratio. A p value less than 0·05 was significant. The study was approved by the hospital ethics committee, and verbal informed consent was obtained from each participant.

FINDINGS: 181 women (aged 19-46·5 years) were enrolled in this study. 79 women received general anaesthesia, and 102 women received spinal anaesthesia. The women did not differ in baseline characteristics such as mean age (30·6 years [SD 6·5] in the general anaesthesia group vs 28·5 years [5·4] in the spinal anaesthesia group; p=0·077), and weight (82·2 kg [SD 14·2] vs 28·5 kg [5·4]; p=0·263). We found no difference between the groups in length of hospital stay (38·7 h [SD 14·5] vs 40·1 h [12·5]; p=0·541), duration of caesarean section (39·9 min [SD 10·1] vs 41·6 min [9·1]; p=0·077), time to demand for analgesia (2·4 h [SD 2·0] vs 2·5 h [1·1]; p=0·634), and hospital readmission (odds ratio 0·77, 95% CI 0·11-5·59). VAS 1 h after the operation was higher in the general anaesthesia group than in spinal anaesthesia group (5·43 [SD 2·9] vs 2·38 [2·32]; p=0·001). Fewer patients who had general anaesthesia needed second and third analgesics than patients who had spinal anaesthesia (23% of women in the general anaesthesia group vs 47% of women in spinal anaesthesia group needed two analgesics; 4% vs 27% needed three or more analgesics; p<0·0001). Two patients in the spinal anaesthesia group had headache after the

INTERPRETATION: General and spinal anaesthesia had a similar safety profile and can be applied according to patients' needs and medical situation in the hospital.

FUNDING: None.

Práce českých autorů...

Brain Behav. 2018 Sep;8(9):e01082. doi: 10.1002/brb3.1082. Epub 2018 Jul 25.

Obstetric anesthesia/analgesia does not affect disease course in multiple sclerosis: 10-year retrospective cohort study.

Harazim H[1], Štourač P[2], Janků P[3], Zelinková H[4], Frank K[3], Dufek M[5], Štourač P[6].

Author information

Abstract

OBJECTIVES: Multiple sclerosis (MS) often occurs in young women and the effect of obstetric anesthesia/analgesia on the disease is poorly understood. No previous study has investigated the course of the disease in women in labor in the Czech Republic. The aim of this study was to evaluate the occurrence or absence of relapses in the 6-month postpartum period in MS parturients with and without obstetric anesthesia/analgesia.

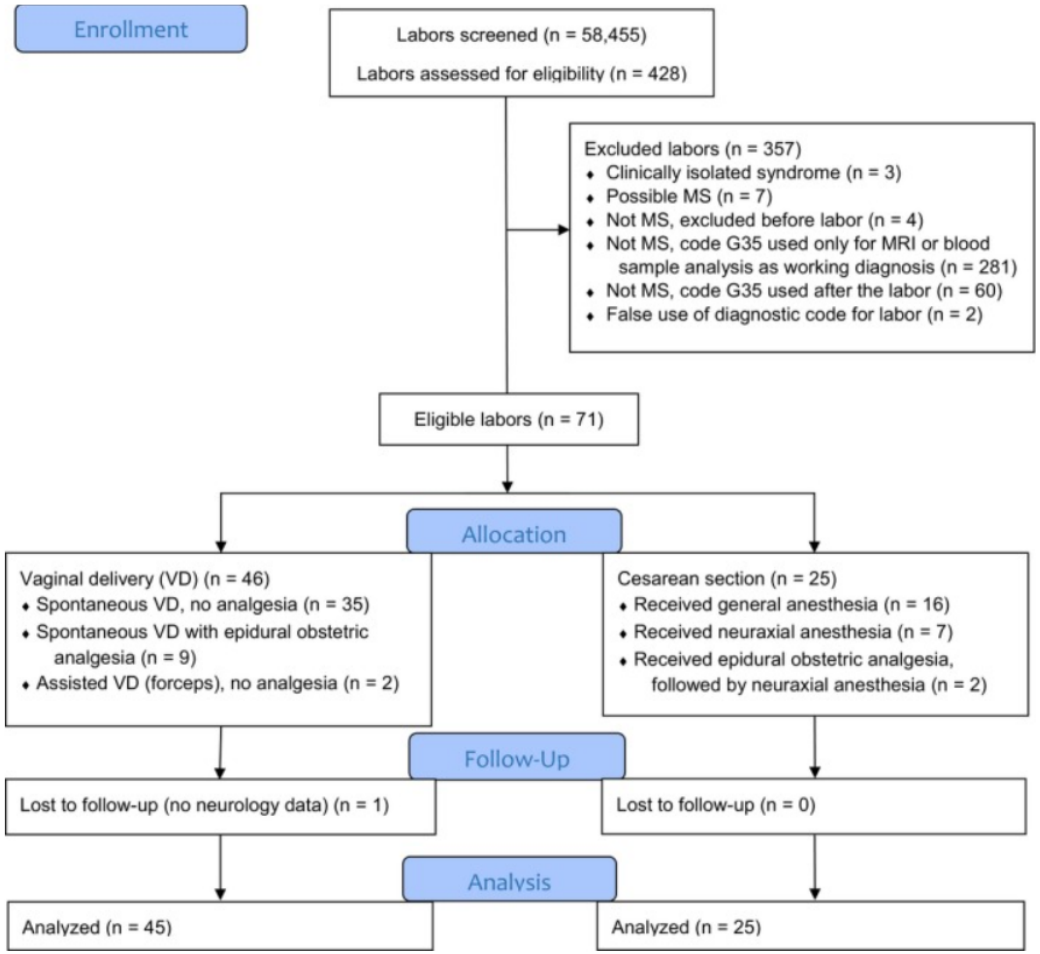
MATERIALS AND METHODS: We retrospectively studied all deliveries (n = 58,455) at the University Hospital Brno from 2004 to 2013 and identified those of the women with an ICD-10 code G35 (MS) recorded anytime in their medical history (n = 428). We included only deliveries of women with confirmed diagnosis at the time of labor (n = 70). Statistical analysis was performed using the Fischer Exact Test.

RESULTS: There were 70 deliveries of 65 women, including 45 vaginal deliveries and 25 Cesarean deliveries (16 under general anesthesia, 8 with epidural anesthesia and 1 with spinal anesthesia). Epidural obstetric analgesia was performed in 11 deliveries. There was no statistically significant difference in relapses between the vaginal delivery group (n = 15; 33%) and Cesarean section group (n = 10; 40%), p = 0.611.

CONCLUSION: Neither delivery mode (vaginal vs Caesarean) nor type of obstetric anesthesia/analgesia was found to have any impact on the course of MS at 6 months postpartum in women with this condition.

Práce českých autorů...

- Studijní období 10 let!
- Primární outcome:
  - Vaginální porod – 33% relaps v 0-6 měsíci (n=15)
  - CS – 40% relaps v 0-6 měsíci (n=8)
- Nebyl shledán statisticky významný rozdíl výskytu relapsu mezi:
  - vaginálním porodem a císařským řezem
  - Vaginálním porodem s či bez epidurální anestezie
  - Císařským řezem v CA (n=7, 44%) a RA (n=3, 33%)



Sci Rep. 2018 Aug 30;8(1):13098. doi: 10.1038/s41598-018-31581-5.

General Anesthesia with the Use of SUPREME Laryngeal Mask Airway for Emergency Cesarean delivery: A Retrospective Analysis of 1039 Parturients.

Fang X[1], Xiao Q[2], Xie Q[3], Liao R[4], Zhu T[5], Li S[3], Bo Z[6].

Author information

Abstract

In comparison to elec
threatening airway pr
(SLMA) in emergency
cesarean delivery un
measures included in
or regurgitation was r
decreasing oxygenati
endotracheal intubati
(including 944 single
neonates received er
patients undergoing e
warranted.

iated with higher risk of life-
IE laryngeal mask airway
ents undergoing emergency
en's Hospital. Outcome
omes. Briefly, no aspiration
on, one was detected by
No subject was switched to
ere 1139 neonates
es. Thirty-seven (3.28%)
ed successfully in 1039
anesthesiologists is

Table 2

Efficiency of airway and adverse events.

Events (n = 1039)	
Successful placement on first attempt	1037 (99.8)
Change to intubation	0
Desaturation[#]	1(0.1)
Regurgitation	0
Aspiration	0
Laryngospasm or bronchospasm	0

Values are expressed as n (%).

[#]Desaturation is defined as pulse oximetry less than 93% for at least 1 min.

Int J Obstet Anesth. 2018 Nov;36:3-10. doi: 10.1016/j.ijoa.2018.05.008. Epub 2018 Jun 1.

A survey of practice of rapid sequence induction for caesarean section in England.

Desai N[1], Wicker J[2], Sajayan A[3], Mendonca C[4].

Author information

Abstract

BACKGROUND: In view of newer techniques of preoxygenation and laryngoscopy and recent obstetric guidelines concerning the management of difficult intubation, we aimed to evaluate the current practice of rapid sequence induction for caesarean section in England.

METHODS: In 2017, 316 questionnaire surveys were posted to all 158 hospitals with caesarean section capabilities in England. At each hospital, one questionnaire was to be completed by the obstetric anaesthetic consultant lead and one by an anaesthetic trainee. Differences in responses between consultants and trainees, regardless of their place of work, were compared for all data using the chi-square and the Fisher's exact tests.

RESULTS: One-hundred-and-eighty complete questionnaires were returned, with an overall response rate of 57%, 98 (54%) from obstetric anaesthetic consultant leads and 82 (45.6%) from trainees). Both head up (57%) and ramped (56%) were the preferred positions for preoxygenation. Less than half of respondents (43%) preoxygenated until the surgeon was scrubbed. Cricoid pressure was used by almost all respondents (98%). Thiopentone (67%) was the most commonly chosen anaesthetic induction agent and most respondents (82%) supported a change to the use of propofol. Suxamethonium (92%) was the neuromuscular blocker of choice but more than half the respondents (52%) supported a change to rocuronium. In the event of a failed intubation, the rescue supraglottic airway device of choice was the i-gel® (65%).

CONCLUSIONS: Our survey demonstrated the significant variation in the practice of rapid sequence induction for caesarean section in obstetrics in the United Kingdom.

KEYWORDS: General anaesthesia; Induction anaesthetics; Neuromuscular blocking drugs; Obstetrics; Opioids; Positioning; Preoxygenation

- Variabilita postupů i použitých léčiv
- Tiopental vs. Propofol
- Suxametonium vs. Rocuronium

IV anestetika

J Clin Anesth. 2018 Aug;48:73-80. doi: 10.1016/j.jclinane.2018.04.010. Epub 2018 May 26.

Hypnotic agents for induction of general anesthesia in cesarean section patients: A systematic review and meta-analysis of randomized controlled trials.

Houthoff Khemlani K[1], Weibel S[2], Kranke P[2], Schreiber JU[3].

Author information

Abstract

STUDY OBJECTIVE: An ideal induction drug for cesarean section (CS) must have quick action, with minimum side effects such as awareness, hemodynamic compromise, and neonatal depression. Thiopentone is frequently used; however, no reliable evidence is available to support its use as a dedicated hypnotic agent in this setting.

DESIGN: A systematic review and meta-analysis, using PRISMA methodology, of randomized controlled trials (RCTs), comparing women undergoing CS using thiopentone with those undergoing CS with propofol, ketamine, or benzodiazepines as hypnotic agents.

DATA SOURCES: Comprehensive search without language restrictions of MEDLINE, EMBASE, and the Cochrane Controlled Trials Registers until May 2015, with an update in January 2017. Included trials must have reported at least one of the following variables: neonatal arterial or venous umbilical blood gas, maternal systolic blood pressure pre- and post-intubation, or Apgar score.

MAIN RESULTS: A total of 911 patients from 18 RCTs were eligible for quantitative analysis. The increase in maternal systolic blood pressure was smaller in patients administered propofol, compared with those administered thiopentone (weighted mean difference [WMD]: -11.52 [-17.60, -5.45]; p = 0.0002). Induction with propofol also resulted in a significantly lower umbilical arterial pO_2 (WMD: -0.12 [-0.20, -0.04]; p = 0.004) than induction with thiopentone. A comparison between propofol and thiopentone revealed no significant differences in other umbilical blood gas parameters or in Apgar scores. In contrast, when comparing ketamine with thiopentone, the number of neonates with a lower Apgar score (<7) at 1 and 5 min was significantly higher in the ketamine group than in the thiopentone group (p = 0.004).

CONCLUSION: The evidence, based on sparse and relatively old trials, indicates that propofol and thiopentone are equally suited for CS. After 1 and 5 min, ketamine yields lower Apgar scores than thiopentone. Additional well-designed trials are needed to reach firmer conclusions.

Low-Dose or High-Dose Rocuronium Reversed with Neostigmine or Sugammadex for Cesarean Delivery Anesthesia: A Randomized Controlled Noninferiority Trial of Time to Tracheal Intubation and Extubation

Petr Stourac, MD, PhD,* Milan Adamus, MD, PhD,† Dagmar Seidlova, MD, PhD,‡
Tomas Pavlik, MSc, PhD,§ Petr Janku, MD, PhD,‖ Ivo Krikava, MD, PhD,¶ Zdenek Mrozek, MD, PhD,†
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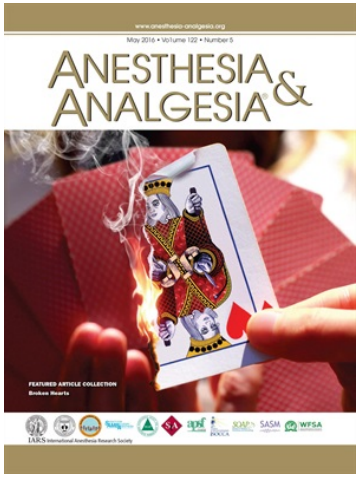
Martina Kosinova, MD,¶ Hana Harazim, MD,¶ Hana Robotkova, MD,‡ Karel Hejduk, MSc,§
Zuzana Hodicka, MD, PhD,‖ Martina Kirchnerova, MD,† Jana Francakova, MD,†
Lenka Obare Pyszkova, MD,† Jarmila Hlozkova, MD,† and Pavel Sevcik, MD, PhD**



Čas do intubace: Rokuronium je noninferiorní k suxamethoniu

Méně resistence k laryngoskopii ve skupině s rokuroniem

Méně pooperačních komplikací ve formě myalgií ve skupině s rokuroniem

Table 3. Evaluation of Intubating Conditions

	ROC group (n = 120)		SUX group (n = 120)		
	n	%	n	%	P^a
Resistance to laryngoscopy					0.019
None	105	88	89	74	
Mild (slight)	14	12	25	21	
Severe (active)	1	1	6	5	
Position of vocal cords					0.48
Medial	38	32	47	39	
Paramedial	11	9	8	7	
Partially abducted	12	10	15	13	
Fully abducted	59	49	50	42	
Laryngoscopic view (Cormack-Lehane)					0.30
I and II	116	97	110	92	
IIIA and greater	4	3	10	8	
Response to intubation attempt					0.26
None	71	59	70	58	
Cardiovascular[b]	42	35	36	30	
Limb movement or cough	7	6	14	12	

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http://dx.doi.org/10.1016/j.ijoa.2017.05.001

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ORIGINAL ARTICLE

Rocuronium versus suxamethonium for rapid sequence induction of general anaesthesia for caesarean section: influence on neonatal outcomes

M. Kosinova,[a] P. Stourac,[b] M. Adamus,[c] D. Seidlova,[d] T. Pavlik,[e] P. Janku,[f] I. Krikava,[b] Z. Mrozek,[c] M. Prochazka,[g] J. Klucka,[b] R. Stoudek,[b] I. Bartikova,[a] H. Harazim,[a] H. Robotkova,[c] K. Hejduk,[e] Z. Hodicka,[f] M. Kirchnerova,[c] J. Francakova,[c] L. Obare Pyszkova,[c] J. Hlozkova,[c] P. Sevcik[h]

Rokuronium 1 mg/kg

- Ovlivňuje hodnoty **Apgar skóre novorozence v 1. minutě** ve srovnání se sukcinylcholinem
- Na další parametry poporodní adaptace novorozence včetně Apgar skóre v 5. a 10. minutě či parametry ABR pupečníkové krve statisticky významný vliv nemá.

1. Re: **Influence** on **neonatal outcomes** of **rocuronium** for rapid sequence induction of general anaesthesia for caesarean section.

Carlos RV, Nani FS, de Boer HD.

Int J Obstet Anesth. 2018 Aug;35:112-113. doi: 10.1016/j.ijoa.2018.01.011. Epub 2018 Mar 9. No abstract available.

PMID: 29628201

Similar articles

2. **Rocuronium** versus suxamethonium for rapid sequence induction of general anaesthesia for caesarean section: **influence** on **neonatal outcomes**.

Halpern SH.

Int J Obstet Anesth. 2018 Aug;35:114. doi: 10.1016/j.ijoa.2018.02.002. Epub 2018 Feb 9. No abstract available.

PMID: 29534952

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3. Re: **Influence** on **neonatal outcomes** of **rocuronium** for rapid sequence induction of general anaesthesia for caesarean section.

Kosinova M, Klucka J, Stourac P.

Int J Obstet Anesth. 2018 Aug;35:113-114. doi: 10.1016/j.ijoa.2018.01.010. Epub 2018 Feb 7. No abstract available.

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Opioidy

- Transplacentární přestup
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- Preeklampsie:
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- Nutná dostupnost antidota na porodním sále – př. Naloxon

Effect on neonatal outcome of pharmacological interventions for attenuation of the maternal haemodynamic response to tracheal intubation: a systematic **review**.

Aman A, Salim B, Munshi K, Raza SA, Khan FA.

Anaesth Intensive Care. 2018 May;46(3):258-271. **Review**.

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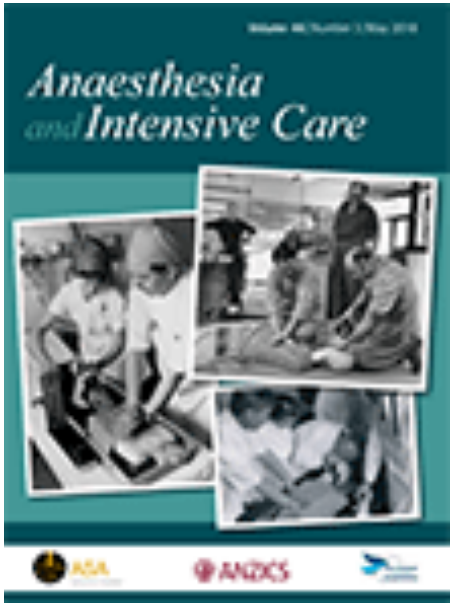

Podání opioidů k ovlivnění hemodynamické odpovědi na intubaci v rámci RSI u rodiček podstupujících císařský řez **vede k ovlivnění novorozence** v Apgar skóre v 5. minutě, ale ovlivnění se nezdá klinicky relevantní.

Anaesthesia. 2018 Jul;73(7):825-831. doi: 10.1111/anae.14296. Epub 2018 Apr 6.

Operating room-to-incision interval and neonatal outcome in emergency caesarean section: a retrospective 5-year cohort study.

Palmer E[1,2], Ciechanowicz S[1], Reeve A[1], Harris S[1,2], Wong DJN[3], Sultan P[1,2].

Author information

Abstract

We conducted a 5-year retrospective cohort study on women undergoing caesarean section to investigate factors influencing the operating room-to-incision interval. Time-to-event analysis was performed for category-1 caesarean section using a Cox proportional hazards regression model. Covariates included: anaesthetic technique; body mass index; age; parity; time of delivery; and gestational age. Binary logistic regression was performed for 5-min Apgar score ≥ 7. There were 677 women who underwent category-1 caesarean section and who met the entry criteria. Unadjusted median (IQR [range]) operating room-to-incision intervals were: epidural top-up 11 (7-17 [0-87]) min; general anaesthesia 6 (4-11 [0-69]) min; spinal 13 (10-20 [0-83]) min; and combined spinal-epidural 24 (13-35 [0-75]) min. Cox regression showed general anaesthesia to be the most rapid method with a hazard ratio (95%CI) of 1.97 (1.60-2.44; p < 0.0001), followed by epidural top-up (reference group), spinal anaesthesia 0.79 (0.65-0.96; p = 0.02) and combined spinal-epidural 0.48 (0.35-0.67; p < 0.0001). Underweight and overweight body mass indexes were associated with longer operating room-to-incision intervals. General anaesthesia was associated with fewer 5-min Apgar scores ≥ 7 with an odds ratio (95%CI) of 0.28 (0.11-0.68; p < 0.01). There was no difference in neonatal outcomes between the first and fifth quintiles for operating room-to-incision intervals. General anaesthesia is associated with the most rapid operating room-to-incision interval for category-1 caesarean section, but is also associated with worse short term neonatal outcomes. Longer operating room-to-incision intervals were not associated with worse neonatal outcomes.

CA – nejrychlejší čas „vstup na operační sál - operační řez“

CA – nejhorší krátkodobý novorozenecký outcome – nižší Apgar skóre v 5. minutě

Delší čas „vstup na operační sál - operační řez“ nebyl asociován s horším novorozeneckým outcome

Hloubka anestezie, „awereness“

Saudi Med J. 2018 Jun;39(6):579-585. doi: 10.15537/smj.2018.6.22376.

Effect of magnesium sulfate on anesthesia depth, awareness incidence, and postoperative pain scores in obstetric patients. A double-blind randomized controlled trial.

Altıparmak B[1], Çelebi N, Canbay Ö, Toker MK, Kılıçarslan B, Aypar Ü.

ABSTRACT

الأهداف: لتقييم آثار المغنيسيوم على عمق التخدير وتحديد أثر المغنيسيوم على حدوث الوعي والألم بعد العملية الجراحية بعد الولادة القيصرية.

الطريقة: صممت الدراسة على أنها دراسة مزدوجة التعمية وعشوائية وأجريت في مستشفى جامعة حجة تبة، أنقره، تركيا خلال الفترة من يناير 2015م حتى مارس 2016م. اشتملت الدراسة على 100 امرأة حامل تراوحت أعمارهم بين 17-41 عام، ASA II والمقرر إجراء عملية قيصرية مع التخدير العام. بعد التحريض استخدام sevoflurane في المجموعة S و desflurane في المجموعة D (مجموعات المراقبة). في المجموعة S-M ومجموعة D-M (مجموعات الدراسة)، بدأ حقن المغنيسيوم بتخدير سيفوفلوران وديفلوريان على التوالي. كما تم الحفاظ على أدنى تركيز من سيفوفلوران وديسلورية. سُجلت نتائج مؤشر (BIS)، واستهلاك الفنتانيل وقيم مقياس التماثلية البصرية (VAS) بعد العملية الجراحية ومتابعة جميع المرضى حتى السنة الأولى بعد العملية الجراحية للتوعية.

النتائج: كانت المتغيرات الديمغرافية للمرضى مماثلة. كانت قيم BIS أعلى بشكل ملحوظ في مجموعات التحكم طوال العملية (p<0.001). لم يظهر أي اختلاف كبير لاستهلاك الفنتانيل أثناء العملية وفترة التوعية. كانت قيم VAS أقل بشكل ملحوظ في مجموعات الدراسة (p<0.05).

الخاتمة: ضخ المغنيسيوم يوفر قيم BIS أقل أثناء العمليات بشكل كبير وانخفاض درجات VAS بعد العملية الجراحية. نحن نعتقد أن المغنيسيوم يمكن أن يكون مفيداً كمساعد للتخدير العام.

- Magnezium jako adjuvans k celkové anestezii u císařského řezu
- Peroperační infuze magnezia poskytla nižší peroperační BIS hodnoty a nižší pooperační VAS.

Table 1 - Patient's characteristics, operation time, and BIS values at different time-points between Sevo and Group Sevo+Mg groups.

Variables	Sevo	Sevo + Mg	*P*-value	Des	Des + Mg	*P*-value
Age (years)	29.7 ± 5.1	30.2 ± 5.8	0.758	30.2 ± 4.3	29.7 ± 4.78	0.735
Weight (kg)	73.4 ± 14.2	77.5 ± 11.8	0.267	79.9 ± 14.7	77.1 ± 14	0.501
Operation time (min)	47.4 ± 11.19	44.8 ± 7.96	0.349	46.28 ± 5.8	44.96 ± 5	0.389
BIS						
BIS 0	95.9 ± 2.76	95.3 ± 2.88	0.456	95.2 ± 3.05	96.28 ± 2.4	0.191
BIS 5	50.8 ± 7.8	39.2 ± 5.5	<0.001	45.96 ± 6.5	35.96 ± 5.1	<0.001
BIS 20	55.6 ± 6.08	40.9 ± 7.4	<0.001	52.6 ± 7.1	4 1.1 ± 9.78	<0.001
BIS end	64.8 ± 7.5	53.0 ± 8.2	<0.001	62.88 ± 4.5	50.88 ± 8.3	<0.001

Values are expressed as mean±SD. Sevo - sevoflurane, des - desflurane, Mg - magnesium sulphate, BIS - bispectral index score, BIS 0 - BIS value before induction, BIS 5 - BIS value 5 minutes after induction, BIS 20 - BIS value 20 minutes after induction, BIS end - BIS value at the end of the operation

Brno

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