Chaque mois, la Collaboration Cochrane produit environ 80 revues systématiques de grande qualité. Si toutes ces revues peuvent apparaître intéressantes, une partie seulement de ces publications concerne l'anesthésie ou la réanimation.

Cochrane France vous propose une sélection chaque trimestre des résumés qui semblent pertinents dans le domaine de l'anesthésie et de la médecine péri-opératoire.
Nous avons également associé des résumés dans des domaines proches pouvant intéresser les anesthésistes - réanimateurs : réanimation, prise en charge de la douleur et chirurgie.

A noter qu'une lettre d'information est spécifiquement dédiée à la douleur. Cette lettre est diffusée par courriel.

Pour chaque résumé sont présentés uniquement les objectifs et les principaux résultats. Un lien permet d'aller chercher sur internet le résumé complet en anglais.

Si un de vos collègues souhaite s'abonner à cette lettre d'information, il peut inscrire sur le site internet de
Cochrane France

Cette lettre a été élaborée en collaboration avec :

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Résumés mis en avant dans cette lettre :

- Needle gauge and tip designs for preventing post-dural puncture headache (PDPH)
- Total intravenous anaesthesia versus inhalational anaesthesia for adults undergoing transabdominal robotic assisted laparoscopic surgery
- Avoidance versus use of neuromuscular blocking agents for improving conditions during tracheal intubation or direct laryngoscopy in adults and adolescents
- High-flow nasal cannulae for respiratory support in adult intensive care patients
- Les blocages nerveux par anesthésie locale pour les personnes souffrant d'une fracture de la hanches

Autres résumés :

- Surgical versus non-surgical management for pleural empyema
- Capnography versus standard monitoring for emergency department procedural sedation and analgesia
- Continuous chest compression versus interrupted chest compression for cardiopulmonary resuscitation of non-asphyxial out-of-hospital cardiac arrest
- Videolaryngoscopy versus direct laryngoscopy for tracheal intubation in children (excluding neonates)
- Antibiotic treatment for Clostridium difficile-associated diarrhoea in adults
- Effects of targeting lower versus higher arterial oxygen saturations on death or disability in preterm infants
- Drug therapy for symptoms associated with anxiety in adult palliative care patients
- Methadone for neuropathic pain in adults
- Tramadol with or without paracetamol (acetaminophen) for cancer pain
- Patient-controlled analgesia with remifentanil versus alternative parenteral methods for pain management in labour

- Low-molecular-weight heparins or heparinoids versus standard unfractionated heparin for acute ischaemic stroke
- Antithrombotic treatment after stroke due to intracerebral haemorrhage
- Amylase in drain fluid for the diagnosis of pancreatic leak in post-pancreatic resection
- Pharmacological interventions for acute pancreatitis
- Unfractionated heparin versus low molecular weight heparins for avoiding heparin-induced thrombocytopenia in postoperative patients
- Endovascular treatment for ruptured abdominal aortic aneurysm
- Laparoscopic surgery for elective abdominal aortic aneurysm repair
- Nasal decontamination for the prevention of surgical site infection in Staphylococcus aureus carriers

Needle characteristics that reduce the occurrence of post-dural puncture headache (PDPH)

Contexte :

Post-dural puncture headache (PDPH) is one of the most common complications of diagnostic and therapeutic lumbar punctures. PDPH is defined as any headache occurring after a lumbar puncture that worsens within 15 minutes of sitting or standing and is relieved within 15 minutes of the patient lying down. Researchers have suggested many types of interventions to help prevent PDPH. It has been suggested that aspects such as needle tip and gauge can be modified to decrease the incidence of PDPH.

Objectifs :

To assess the effects of needle tip design (traumatic versus atraumatic) and diameter (gauge) on the prevention of PDPH in participants who have undergone dural puncture for diagnostic or therapeutic causes.

Conclusions des auteurs :

There is moderate-quality evidence that atraumatic needles reduce the risk of post-dural puncture headache (PDPH) without increasing adverse events such as paraesthesia or backache. The studies did not report very clearly on aspects related to randomization, such as random sequence generation and allocation concealment, making it difficult to interpret the risk of bias in the included studies. The moderate quality of the evidence for traumatic versus atraumatic needles suggests that further research is likely to have an important impact on our confidence in the estimate of effect.

Référence de la revue :

Arevalo-Rodriguez I, Muñoz L, Godoy-Casasbuenas N, Ciapponi A, Arevalo JJ, Boogaard S, Roqué i Figuls M. Needle gauge and tip designs for preventing post-dural puncture headache (PDPH). Cochrane Database of Systematic Reviews 2017, Issue 4. Art. No.: CD010807. DOI: 10.1002/14651858.CD010807.pub2

Intravenous or inhalational anaesthesia for abdominal surgery assisted by a computerized surgical robot

Contexte :

Rapid implementation of robotic transabdominal surgery has resulted in the need for re-evaluation of the most suitable form of anaesthesia. The overall objective of anaesthesia is to minimize perioperative risk and discomfort for patients both during and after surgery. Anaesthesia for patients undergoing robotic assisted surgery is different from anaesthesia for patients undergoing open or laparoscopic surgery; new anaesthetic concerns accompany robotic assisted surgery.

Objectifs :

To assess outcomes related to the choice of total intravenous anaesthesia (TIVA) or inhalational anaesthesia for adults undergoing transabdominal robotic assisted laparoscopic gynaecological, urological or gastroenterological surgery.

Conclusions des auteurs :

It is unclear which anaesthetic technique is superior - TIVA or inhalational - for transabdominal robotic assisted surgery in urology, gynaecology and gastroenterology, as existing evidence is scarce, is of low quality and has been generated from exclusively male patients undergoing robotic radical prostatectomy.

An ongoing trial, which includes participants of both genders with a focus on quality of recovery, might have an impact on future evidence related to this topic.

Référence de la revue :

Herling S, Dreijer B, Wrist Lam G, Thomsen T, Møller A. Total intravenous anaesthesia versus inhalational anaesthesia for adults undergoing transabdominal robotic assisted laparoscopic surgery. Cochrane Database of Systematic Reviews 2017, Issue 4. Art. No.: CD011387. DOI: 10.1002/14651858.CD011387.pub2

The effect of avoiding neuromuscular blocking agents on conditions for placing a tube in the windpipe of patients undergoing general anaesthesia

Contexte :

Tracheal intubation during induction of general anaesthesia is a vital procedure performed to secure a patient's airway. Several studies have identified difficult tracheal intubation (DTI) or failed tracheal intubation as one of the major contributors to anaesthesia-related mortality and morbidity. Use of neuromuscular blocking agents (NMBA) to facilitate tracheal intubation is a widely accepted practice. However, because of adverse effects, NMBA may be undesirable. Cohort studies have indicated that avoiding NMBA is an independent risk factor for difficult and failed tracheal intubation. However, no systematic review of randomized trials has evaluated conditions for tracheal intubation, possible adverse effects, and postoperative discomfort.

Objectifs :

To evaluate the effects of avoiding neuromuscular blocking agents (NMBA) versus using NMBA on difficult tracheal intubation (DTI) for adults and adolescents allocated to tracheal intubation with direct laryngoscopy. To look at various outcomes, conduct subgroup and sensitivity analyses, examine the role of bias, and apply trial sequential analysis (TSA) to examine the level of available evidence for this intervention.

Conclusions des auteurs :

This review supports that use of an NMBA may create the best conditions for tracheal intubation and may reduce the risk of upper airway discomfort or injury following tracheal intubation. Study results were characterized by indirectness, heterogeneity, and high or uncertain risk of bias concerning our primary outcome describing difficult tracheal intubation. Therefore, we categorized the GRADE classification of quality of evidence as moderate to low. In light of defined outcomes of individual included trials, our primary outcomes may not reflect a situation that many clinicians consider to be an actual difficult tracheal intubation by which the patient's life or health may be threatened.

Référence de la revue :

Lundstrøm LH, Duez CHV, Nørskov AK, Rosenstock CV, Thomsen JL, Møller A, Strande S, Wetterslev J. Avoidance versus use of neuromuscular blocking agents for improving conditions during tracheal intubation or direct laryngoscopy in adults and adolescents. Cochrane Database of Systematic Reviews 2017, Issue 5. Art. No.: CD009237. DOI: 10.1002/14651858.CD009237.pub2

High-flow nasal cannulae for breathing support in adult intensive care patients

Contexte :

High-flow nasal cannulae (HFNC) deliver high flows of blended humidified air and oxygen via wide-bore nasal cannulae and may be useful in providing respiratory support for adult patients experiencing acute respiratory failure in the intensive care unit (ICU).

Objectifs :

We evaluated studies that included participants 16 years of age and older who were admitted to the ICU and required treatment with HFNC. We assessed the safety and efficacy of HFNC compared with comparator interventions in terms of treatment failure, mortality, adverse events, duration of respiratory support, hospital and ICU length of stay, respiratory effects, patient-reported outcomes, and costs of treatment.

Conclusions des auteurs :

We were unable to demonstrate whether HFNC was a more effective or safe oxygen delivery device compared with other oxygenation devices in adult ICU patients. Meta-analysis could be performed for few studies for each outcome, and data for comparisons with CPAP or BiPAP were very limited. In addition, we identified some risks of bias among included studies, differences in patient groups, and high levels of statistical heterogeneity for some outcomes, leading to uncertainty regarding the results of our analysis. Consequently, evidence is insufficient to show whether HFNC provides safe and efficacious respiratory support for adult ICU patients.

Référence de la revue :

Corley A, Rickard CM, Aitken LM, Johnston A, Barnett A, Fraser JF, Lewis SR, Smith AF. High-flow nasal cannulae for respiratory support in adult intensive care patients. Cochrane Database of Systematic Reviews 2017, Issue 5. Art. No.: CD010172. DOI: 10.1002/14651858.CD010172.pub2

Les blocages nerveux par anesthésie locale pour les personnes souffrant d'une fracture de la hanche

Contexte :

Les blocs nerveux avec différents agents anesthésiques locaux sont utilisés pour réduire la douleur suite à une fracture de la hanche et suite aux opérations chirurgicales associées. Cette revue a été publiée pour la première fois en 1999 et a été mise à jour en 2001, 2002, 2009 et 2017.

Objectifs :

Cette revue se concentre sur l'utilisation de blocs nerveux périphériques comme analgésie préopératoire, comme analgésie postopératoire ou comme complément à l'anesthésie générale pour la chirurgie de la fracture du col du fémur. Nous avons entrepris cette mise à jour pour rechercher de nouvelles études et mettre à jour les méthodes de manière à refléter les normes Cochrane.

Conclusions des auteurs :

Des preuves de bonne qualité montrent que le blocage régional réduit la douleur lors des mouvements dans les 30 minutes après la mise en place d'un bloc. Des données de qualité modérée montrent une réduction du risque de pneumonie, une réduction de la durée nécessaire avant la première mobilisation et une réduction des dépenses avec ce schéma analgésique (lorsqu'une injection unique est réalisée pour la mise en place d'un bloc).

Référence de la revue :

Guay J, Parker MJ, Griffiths R, Kopp S. Peripheral nerve blocks for hip fractures. Cochrane Database of Systematic Reviews 2017, Issue 5. Art. No.: CD001159. DOI: 10.1002/14651858.CD001159.pub2