Cochrane Pre-hospital and Emergency Care

http://pec.cochrane.org

## January 2023

### Happy New Year


The Cochrane PEC team wishes you all the best for 2023.

The Cochrane PEC is involved in knowledge translation particularly by disseminating Cochrane reviews to enhance emergency care professionals'knowledge and decision making.
All year round, meet us in conferences, training sessions and on our website!

## COCHRANE PEC MAJOR CONTRIBUTOR

**The European Society for Emergency Medicine (EUSEM)**

Prof Abdo Khoury and Dr Jim Connolly

Abdo Khoury

Prof Abdo Khoury
EUSEM Immediate-past president

Prof Abdo Khoury is an emergency physician in the Department of Emergency Medicine and Critical Care at Besançon University Hospital, University of Franche-Comté,France.. He is involved in research and knowledge translation and in humanitarian and disaster medicine. He has been involved in the training of physicians in Ukraine in a partnership between EUSEM and WHO Academy.

Dr Jim Connolly

EUSEM President

Dr Jim Connolly is an emergency physician working in the north of England in a large tertiary unit. He was an early adopter of Point of Care Ultrasound and has written and extensively taught on PoCUS.

Both of them support the Cochrane PEC
in its dissemination of emergency medicine evidence.

## RECENT REVIEWS

Cochrane Library

Non-steroidal anti inflammatory drugs for chronic low back pain

*W. van der Gaag, P. Roelofs, W. Enthoven, M. van Tulder, B. Koes*

For people with acute low back pain,  non-steroidal anti-inflammatory drugs (NSAIDs) were found to be slightly better in reducing pain (moderate quality evidence) and disability (high quality evidence) than placebo in the short-term. However, the magnitude of the effect is small and probably not clinically relevant. There is low quality evidence that there is no clear difference between selective cyclo-oxygenase-2  inhibitor NSAIDs and non-selective NSAIDs in reducing pain in the short-term. In all cases, potential (gastrointestinal) adverse events should be taken into account.

Colchicine for acute gout

*B. McKenzie, M. Wechalekar, R. Johnston, N. Schlesinger, R. Buchbinder*

Both high- and low-dose colchicine improve pain when compared to placebo, however, low-dose colchicine may be the preferred treatment option for acute gout as low-quality evidence suggests that high-dose (but not low-dose) colchicine may increase the number of adverse events compared to placebo.

From a clinical perspective, first-line treatment of acute gout is a choice between low-dose colchicine, non-steroidal anti-inflammatory drugs (NSAIDs) or glucocorticoids, and guidelines do not differentiate between them except to note that a patient's risk profile and comorbidities will likely influence the choice of therapy in clinical practice. New data presented in this review indicates that there may be no difference in efficacy between low-dose colchicine and NSAIDs.

## Non-steroidal anti-inflammatory drugs for acute gout

*C. van Durme, M. Wechalekar, R. Landewé, J. Pardo, S. Cyril, D. van der Heijde, R. Buchbinder*

Low-certainty evidence from 1 placebo-controlled trial suggests that NSAIDs may improve pain at 24 hours and may have little to no effect on function, inflammation, or adverse events for treatment of acute gout. Moderate-certainty evidence shows that COXIBs and non-selective NSAIDs are probably equally beneficial with regards to improvement in pain, function, inflammation, and treatment success, although non-selective NSAIDs probably increase withdrawals due to adverse events and total adverse events. Moderate-certainty evidence shows that systemic glucocorticoids and NSAIDs probably are equally beneficial in terms of pain relief, improvement in function, and treatment success. Withdrawals due to adverse events were also similar between groups, but NSAIDs probably result in more total adverse events. Low-certainty evidence suggests no difference in inflammation between groups. Only low-certainty evidence was available for the comparisons NSAID versus rilonacept and NSAID versus acupuncture from single trials, or one NSAID versus another NSAID, which also included many NSAIDs that are no longer in clinical use. Although these data were insufficient to support firm conclusions, they do not conflict with clinical guideline recommendations based upon evidence from observational studies, findings for other inflammatory arthritis, and expert consensus, all of which support the use of NSAIDs for acute gout.

## Parenteral versus enteral fluid therapy for children hospitalized with bronchiolitis

*P. Gill, M. Rashidul Anwar, E. Kornelsen, P. Parkin, Q. Mahood, S. Mahant*

Based on two randomized controlled trials, enteral tube feeding likely results in little to no difference in length of hospital stay compared with the Intraveinous (IV) fluid group.
However, enteral tube fluid therapy likely results in a large increase in the success of insertion of fluid modality at first attempt, and a large reduction in change in modality of fluid therapy. It also probably reduces local complications compared to the IV fluid group. Despite bronchiolitis being one of the most prevalent childhood conditions, we identified only two studies with under 1000 participants in total, which highlights the need for multicentre trials. Future studies should explore type of fluid administered, parent-reported outcomes and preferences, and the role of shared decision-making.

## Antibiotics for treatment of sore throat in children and adults

*A. Spinks, P. Glasziou, C. Del Mar*

Antibiotics have a modest beneficial effect in reducing the likelihood of suppurative and non-suppurative complications (except for acute sinusitis and acute glomerulonephritis) as well as in reducing the duration of symptoms of sore throat. However, the effect on symptoms is small, so that clinicians must base their judgement on individual cases as to whether it is clinically justifiable to employ antibiotics to produce this

effect. This decision should be driven by whether the underlying cause of the sore throat is of bacterial or viral origin, although this is not always possible to determine.

Acute rheumatic fever is common amongst people living in some parts of the world, and antibiotics may reduce the incidence of this complication in these settings. For other settings where rheumatic fever is rare, there is a balance to be made between modest symptom reduction and the hazards of antimicrobial resistance.

## Oral antihistaminine-decongestant-analgesic combinations for the common cold

*A. De Sutter, L. Eriksson, M. L van Driel*

The scarce data on the effectiveness of antihistamine-analgesic-decongestant combinations for the common cold show that there is some general benefit in adults and older children, which must be weighed against the risk of adverse events. The effect on individual symptoms is probably too small to be clinically relevant. Combinations containing phenylpropanolamine must be avoided. In young children these combinations should not be used given that evidence of their effectiveness is lacking and their potentially associated dangers.

## Intravenous thrombolytic treatment and endovascular thrombectomy for ischaemic wake-up stroke

*M. Roaldsen, H. Lindekleiv, E. Mathiesen*

There is good evidence that intravenous thrombolytic treatment improves functional and neurological outcomes without increasing death in selected patients with wake-up stroke. There is also good evidence that endovascular thrombectomy treatment substantially improves functional and neurological outcomes without increasing death in selected patients with wake-up stroke.

## Oral antiplatelet therapy for acute ischaemic stroke

*J. Minhas, T. Chithiramohan, X. Wang, S. Barnes, R. Clough, M. Kadicheeni, L. Beishon, T. Robinson*

The review provided strong evidence for the benefits of aspirin 160 mg to 300 mg, given as soon as is practicable (and continued as a once daily dose), in people with suspected acute ischaemic stroke. This evidence applied chiefly to people seen within 48 hours of stroke onset and in whom intracranial haemorrhage had been excluded, or was thought to be clinically unlikely, and had no definite contraindications to aspirin. In people who are unable to swallow safely, aspirin may be given per rectum as a suppository or via a nasogastric tube.

If there is likely to be a delay before computer tomography or magnetic resonance brain scanning can be performed to exclude intracranial haemorrhage it may be reasonable to give aspirin until the scan result is known. If the scan shows intracranial haemorrhage, then aspirin should probably be discontinued.

This review confirmed the benefit of continuing treatment in hospital, and external evidence supports its continuation after hospital discharge.

## Proton pump inhibitor treatment initiated prior to endoscopic diagnosis in upper gastrointestinal bleeding

*T. Kanno, Y.Yuan, F. Tse, C.Howden, P. Moayyedi, G.Leontiadis*

The results of this Cochrane Review remain inconclusive for the important clinical outcomes of mortality and rebleeding, which should drive clinical decisions and guideline recommendations. The modest

beneficial effect of pre-endoscopic proton pump inhibitor (PPI) treatment on the need for endoscopic haemostatic treatment (of moderate-certainty evidence) has been interpreted variably by different guideline panels. It seems impossible to derive any clear implications for practice based solely on the evidence of efficacy derived from this Cochrane Review. Guideline panels, policymakers, individuals and clinicians would have to consider additional factors that are beyond the scope of a Cochrane Review, including the balance between benefits and harms, patient values and preferences, resource requirement, cost-effectiveness, feasibility, acceptability and equity implications.

Meanwhile, it seems reasonable that specific conditions could slightly tip the balance in favour of or against using pre-endoscopic PPI treatment in people presenting with upper gastrointestinal (GI) bleeding. For example, pre-endoscopic PPI therapy seems more likely to be beneficial if endoscopy is expected to be delayed (e.g. any more than one or two days) or when expertise in endoscopic haemostasis is suboptimal (thus, increasing the relative importance of the reduction in the need for endoscopic haemostasis) (Barkun 2008). It seems less meaningful to initiate pre-endoscopic PPI treatment when endoscopy is planned to take place in a few hours.

Calcium channel blockers versus other classes of drugs for hypertension

*J. Zhu, N. Chen, M. Zhou, J. Guo, C. Zhu, J.Zhou, M. Ma, L. He*

This update changed some conclusions of the previous version of this review. First-line calcium channel blockers (CCBs) do not affect total mortality as compared to other antihypertensive drug classes. First-line CCBs reduce major cardiovascular events, stroke, and cardiovascular mortality as compared to beta-blockers. First-line CCBs increase major cardiovascular and congestive heart failure events as compared to diuretics. First-line CCBs reduce stroke as compared to angiotensin-converting enzyme (ACE) inhibitors and myocardial infarction as compared to angiotensin receptor blockers (ARBs), but they increase congestive heart failure events as compared to both ACE inhibitors and ARBs.

The review shows an advantage of diuretics over CCBs in reducing major cardiovascular mortality and congestive heart failure events. We found evidence supporting CCBs over beta-blockers in reduce major cardiovascular events, stroke, and cardiovascular mortality. It should be noted that many of the differences found in the current review are not robust, and further trials might change the conclusions.

## COCHRANE PEC PUBLICATIONS

Abstract

A successful collaboration between the Cochrane PEC and the Cochrane Emergency and Critical Care review group resulted in the publication of an article in the Journal of the French Society of Intensive Care Medicine.

Méd. Intensive Réa. 31(2022)(in press)
DOI : 10.37051/mir-00108

Médecine Intensive Réanimation

PRATIQUE DE L'EXPERT / *EXPERT'S PRACTICE*

## La cochrane en médecine d'urgence et en réanimation : activités et adaptation pendant la pandémie COVID-19

*The cochrane in emergency medicine and critical care: activities and adaptation during the COVID-19 pandemic*

Virginie-Eve Lvovschi[1*] • Harald Herkner[2] • Julie Dumouchel[3] • Sébastien Beroud[4] • Nordine Nekhili[5] • Patrick Miroux[6] Yannick Auffret[7] • Teo Quay[8] • Andrew Smith[9] • Kirk Magee[10] • Meyran Daniel[11] • Patricia Jabre[12]

# COCHRANE PEC CORNER AND VIDEOS

**The Cochrane PEC team is very pleased to announce its new partnership with Top MU (Transfert Optimisé des Publications en Médecine d'Urgences).**

Top MU Cochrane Pre-hospital and Emergency Care

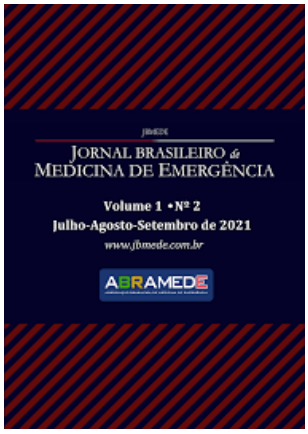
From this partnership, new videos will soon be available. These videos aims to get Cochrane evidence to practitioners or researchers in the way they need it.


**The Cochrane PEC team also selects Cochrane reviews relevant to emergency medicine and publishes them in different formats and languages.**


EMERGENCIAS

**Perlas para urgenciólogos**

A Cochrane PEC Corner is regularly published in the Journal of the Spanish Society of Emergency Medicine EMERGENCIAS.




JORNAL BRASILEIRO DE MEDECINA DE EMERGENCIA

A Cochrane PEC Corner is now regularly published in the Journal of the Brasilian Society of Emergency Medicine 'Jornal Brasileiro de Medecina de Emergência'.


ANNALES FRANCAISES DE MEDECINE D'URGENCE

Cochrane PEC PEARLS are also regularly published in French in the Journal of the French Society of Emergency Medicine 'Annales Françaises de Médecine d'Urgence'

The Cochrane PEC also produces videos in French summarizing some Cochrane emergency reviews. They are available on the Cochrane PEC website and on Daily Motion.

Dailymotion

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## COCHRANE PEC PARTENARIAT

The Cochrane PEC is pleased to collaborate with Cochrane Brasil to translate Cochrane abstracts prior to their publication in the Jornal Brasileiro de Medecina de Emergência.


Cochrane Brazil

The Cochrane PEC is also pleased to collaborate with the French Society of Disaster Medicine 'SFMC' in the dissemination of Cochrane reviews.

SFMC
Société Française de Médecine de Catastrophe

## LATEST NEWS

We've been there

[Salon secours expo 2022]

Paris, France

10-12 March 2022

Urgences 2022

Paris, France

8-10 June 2022

Special congress session

Cochrane and Covid-19

Urgences le congrès

Paris France

June 2022

EUSEM 2022

Berlin, Germany

15-19 October 2022


## UPCOMING EVENTS

Friday Research Sessions

Médipôle Lyon-Villeurbanne

Lyon, France

10 march 2023

Urgences le congrès

Paris, France

7-9 june 2023


Cochrane Event

London, England

3-6 September 2023

Eusem 2023

Barcelona, Spain

16-20 september 2023


## COCHRANE PEC LIFE

We are pleased to welcome Dr. Nicolas Cazes in our team.

Carnet Rose

We congratulate our team members, Dr Dumouchel and Dr Yordanov, for their new babies.

## TRAINING AND WORKSHOP

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**Cochrane Pre-hospital and Emergency Care**
Contact : Patricia Jabre, director
SAMU de Paris - Hôpital Necker Enfants Malades - APHP
Université Paris Descartes - Paris V
149 rue de Sèvres, 75015 Paris, France
Phone: +33 1 44 49 24 51
Email: contact@pec-cochrane.org
Website: http://pec.cochrane.org/

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