

Introduction

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Our *CJEM* Journal Club consists of two sections. The first, "Critically Appraised Topics," is devoted to evidence-based reviews of specific EM-related questions. Questions will be answered by using a focused literature review and presenting the results in a CAT (Critically Appraised Topic) format. The aims of this section are to address clinical or administrative questions, to demonstrate the application of evidence-based medicine methods in answering such questions, and to accumulate a CAT database for emergency physicians.

The section editor for Critically Appraised Topics is Dr. Michael Bullard, 1G1.58 Walter Mackenzie Health Sciences Centre, 8440 112 St., Edmonton AB T6G 2B7; fax 780 492-9857; michael.bullard@ualberta.ca

The second section, "Selected Articles," is devoted to evidence-based article reviews. The aims of this section are to demonstrate the use of the critical review format, to review articles of interest to emergency physicians, and to determine the relative validity and usefulness of these articles. Review articles will address 3 key questions: What are the results?

Are the results valid? and Will the results help me care for my patients? In each issue of *CJEM*, we hope to have 3 to 5 important articles reviewed by emergentologists with a special interest or expertise in the topic under discussion. The preferred review methodology, including critical review forms, is described in "Users' Guide to the Medical Literature," a series published in *JAMA*.¹⁻⁴ Authors wishing to view samples of appropriate article review format may visit the *Evidence-Based Medicine* Web site (cebm.jr2.ox.ac.uk) or peruse articles published in *ACP Journal Club*.

The section editor for Selected Articles is Dr. David Rhine, Department of Emergency Medicine, King Faisal Specialist Hospital and Research Center; PO Box 3354, MBC 84, Riyadh 11211, Saudi Arabia; fax 966-1-442-1436; drhine@hotmail.com

CATs and selected article reviews should be submitted to the appropriate section editor. Suitability for publication in *CJEM* will be determined by the quality of the review and the topic's level of interest to emergency physicians. For further guidelines see "Instructions for Authors" (page 77).

Introduction

Le Club de lecture du *JCMU* comporte deux sections. La première, «Revue critique» se consacre à la revue de questions spécifiques basées sur des preuves scientifiques liées à la MU. Pour répondre aux questions, une revue de la littérature ciblée dont les résultats seront présentés sous forme de RCS (Revue critique de sujet) sera effectuée. Les objectifs de cette section sont d'examiner des questions cliniques ou administratives, de démontrer l'application de méthodes basées sur des preuves scientifiques pour répondre à de telles questions et d'accumuler une banque de données RCS pour les urgentologues.

Le rédacteur de la section Revue critique est le D^r Michael Bullard, 1G1.58 Walter Mackenzie Health Sciences Centre, 8440 112 St., Edmonton AB T6G 2B7; fax 780 492-9857; michael.bullard@ualberta.ca.

La seconde section, «Articles sélectionnés», est consacrée à la revue d'articles basée sur des preuves scientifiques. Les objectifs de cette section sont de démontrer le recours au format de revue critique pour analyser des articles d'intérêt pour les médecins d'urgence et pour déterminer la validité relative et l'utilité de ces articles. Les articles de revue examineront trois questions clés : Quels sont les résultats? Les résultats sont-ils valables? et Les résultats m'aideront-ils à soigner mes patients? Dans chaque numéro du *JCMU*, nous espérons faire analyser de 3 à 5 articles importants par des urgentologues qui démontrent un intérêt spécial ou une compétence pour le sujet discuté. La méthodologie de revue de choix, comprenant les formes de revue critique, est décrite dans le «Users' Guide to Medical Literature», une série publiée dans le *Journal of the American Medical Association*.¹⁻⁴ Les

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auteurs qui souhaitent consulter des exemples de méthode adéquate de revue d'articles peuvent visiter le site Web *Evidence-Based Medicine* (cebm.jr2.ox.ac.uk) ou consulter des articles publiés dans le *ACP Journal Club*.

Le rédacteur de la section Articles sélectionnés est le Dr David Rhine, Department of Emergency Medicine, King Faisal Specialist Hospital and Research Center; PO Box 3354, MBC 84, Riyadh 11211, Saudi Arabia; fax 966-1-442-1436; drhine@hotmail.com.

Les RCS et les revues d'articles sélectionnés doivent être soumises au rédacteur de section approprié. La pertinence pour publication dans le *JCMU* sera déterminée à partir de la qualité de la revue et du niveau d'intérêt du sujet pour les urgentologues. Pour d'autres directives, consultez les «Instructions for Authors» (page 77).

References

1. Oxman AD, Sackett DL, Guyatt GH. The Evidence-Based Medicine Working Group. Users' guides to the medical literature: how to get started. *JAMA* 1993;270:2093-5.
2. Guyatt GH, Sackett DL, Cook DJ. The Evidence-Based Medicine Working Group. Users' guides to the medical literature: how to use an article about therapy or prevention. Are the results of the study valid? *JAMA* 1993;270:598-601.
3. Guyatt GH, Sackett DL, Cook DJ. The Evidence-Based Medicine Working Group. Users' guides to the medical literature: how to use an article about therapy or prevention. What were the results and will they help me in caring for my patients? *JAMA* 1994;271:59-63.
4. Dans AL, Dans LF, Guyatt GH, Richardson S. The Evidence-Based Medicine Working Group. Users' guides to the medical literature: how to decide on the applicability of clinical trial results. *JAMA* 1998;279:545-9.

CRITICALLY APPRAISED TOPICS

Are inhaled corticosteroids useful in the emergency department treatment of acute asthma?

Article chosen

Rodrigo G, Rodrigo C. Inhaled flunisolide for acute severe asthma [see comment]. *Am J Respir Crit Care Med* 1998; 157:698-703.

Reviewer

Marcia Edmonds, MD,
University of Alberta, Edmonton, Alta.

Date appraised: Dec. 15, 1998

This article has been peer reviewed.

Clinical bottom line

This study shows that, in patients receiving inhaled salbutamol in the emergency department (ED), the addition of high-dose flunisolide (Bronalide; Boehringer Ingelheim, Burlington, Ont.) significantly improves peak expiratory flow rate (PEFR) and forced expiratory volume in 1 minute (FEV₁) compared with placebo. There was a trend toward decreased admission rate in the flunisolide group that may be clinically significant but did not achieve statistical significance. We do not know if there is an additive effect of oral or intravenous steroids. Other trials have shown conflicting results.

The search

A MEDLINE search, 1995 to 1998, using the following MeSH headings:

- | | |
|--------------------------------------|-------|
| 1. exp/ asthma | 8457 |
| 2. exp/ anti-inflammatories, steroid | 16770 |
| 3. exp/ double-blind method | 13180 |

- | | |
|------------------------|------|
| 4. exp/ emergencies | 3325 |
| 5. 1 AND 2 AND 3 AND 4 | 3 |

The evidence

Design: Randomized, double-blind trial.

Population: Ninety-four patients aged 18 to 50 years who presented to the ED with an exacerbation of asthma (with FEV₁ and PEFR \leq 50% of predicted). The treatment groups were similar in all baseline demographic and clinical variables reported.

Intervention: Flunisolide 1 mg and salbutamol 400 μ g *q* 10 min. versus salbutamol alone 400 μ g *q* 10 min. All treatments were by multi-dose inhaler with spacer.

Outcomes measured: FEV₁, PEFR, respiratory rate, heart rate, accessory-muscle use, dyspnea and wheezing were measured at 30-minute intervals for 3 hours after presentation. Side effects (nausea, palpitations, tremor, anxiety and