



# How to Prepare a Clinical Case Report

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Matthew G. Schuermann, MD

Associate Program Director

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# Clinical Case Reports

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- Routine case reports (wards)
- Case reports of scientific value
  - Case reports
  - Case reports with a literature review
  - Case series reports
  - Systematic reviews of cases



# Clinical Case Reports: Importance

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- First link in the chain of evidence.
- The first link needs to be solid for the chain to be strong.
- There can be an evidence-based format for strong case reports.



# Case Reports for the Wards

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- Familiar SOAP format:
  - Presentation of problem (chief complaint)
  - Subjective history of HPI
  - Objective data
  - Assessment (differential, diagnosis)
  - Plans of treatment, care and evaluation
  - Discussion



# Clinical Case Reports

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- Form of scientific & professional communication
- It has its own rules
- These rules allow for more clear presentations and more scientific value



# Clinical Case Reports: Keys to Success

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- Relevance of the topic
- Value of the presentation
  - Precision, organization & structure
- Knowledge that this case contributes to the existing general information of a topic
- Clarity of the elements that can be retained for practice and/or research



# Clinical Case Reports: Reasons & Motivations 1

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- Unusual presentation of unknown etiology
- Unusual natural history
- Unusual natural or clinical courses
- Challenging differential diagnosis
- Mistake in diagnosis – its causes & consequences
- Unusual and/or unexpected effect of treatment
- Diagnostic and therapeutic “accidents”
- Unusual co-morbidity
- Transfer of medical technology



# Clinical Case Reports: Reasons & Motivations 2

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- Unusual setting of medical care
- Management of an emergency case
- Patient compliance
- Patient/doctor interaction
- Single case clinical trial ('n-of-1 trial')
- Clinical situation which cannot be reproduced for ethical reasons
- Limited access to cases
- New medical technology
- Confirmation of something already known



# The Case Report: Components

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- Summary
- Introduction
- Presentation of the case
- Discussion and conclusion
- References



# Clinical Case Reports: The Title

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- Should directly convey the point of the article
- “Cute” or allegorical titles may catch the eye but also lead to confusion
- Do not complicate the presentation with extraneous data



# Clinical Case Reports: The Data

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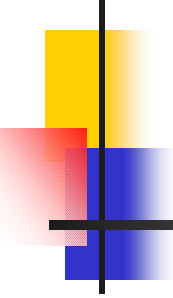
- Provide enough information to understand the case
- Essential information only
- “Go for the jugular”



# Clinical Case Reports: Summary

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- Motives & reasons for the report
  - *“Why are we reporting this”*
- Background of the problem
  - *“In what context”*
- Highlights of the report
  - *“What have we found”*
- Conclusions
  - *“What does this mean”*
- **Similar to an abstract**



# Clinical Case Reports: Summary 2

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- The summary represents the “abstract” that is submitted
- It serves the same purpose as an abstract for a research article
- It allows the busy reader to get the point quickly
- It is not always required for publication



# Clinical Case Reports: Introduction

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- Definition of the topic
  - Problem, disease, mgmt
- General context of the topic
  - Knowledge, clinical situation
- Question which this report should answer of gap in knowledge this report can fill
- Objectives and justification of this report



# Clinical Case Reports: Presentation of the Case

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- This section is the core of the report
  - Patients are what this is all about
- **Clinimetrics**
  - Measurement of clinical data
- **Hermeneutics**
  - The exercise/study of interpretation and understanding



# Clinical Case Reports: Presentation of the Case 2

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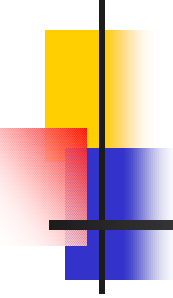
- Situation, context & triggering factor(s) of the report
- Clinical (and paraclinical) initial state of the patient
- Evolution of the clinical (& paraclinical) spectrum of disease
- Diagnostic & therapeutic acts
- Expected and actual results of actions carried out or omitted
- Unexpected results and events



# Clinical Case Reports: Discussion

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- Generally as long as everything else combined
- Allows authors to express opinions, doubts, questions
- Essentially the most important part of the report as it leads to new information or leads to the search for new information



# Clinical Case Reports: Discussion 2

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- Discussion of observations and results
- Contribution of the report to the fundamental knowledge of the problem represented by the reported case
- Proposals & recommendations for practice and for research



# Clinical Case Reports: References

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- Health problem and disease under study
- Clinical and paraclinical actions
- Decisions and actions under consideration



# Clinical Case Reports: Ethics & Confidentiality

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- Some now advocate informed consent for the use of a case in the literature
- Certainly photographs should not reveal the patient's identity & if they must then written consent is a must
- Care should be taken not to have the patient be identified from the presentation



# Clinical Case Reports: CMAJ Expectations

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## **Summary**

- Does the summary give a succinct description of the case and its implications?

## **Introduction**

- Is the case new or uncommon with important health implications?
- Is the rationale for reporting the case adequately explained?
- Has an adequate review of the literature been done?



# Clinical Case Reports: CMAJ Expectations 2

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## **Description of the case**

- Is the case described briefly but comprehensively?
- Is the case described clearly?
- Are the results of investigations and treatments described adequately, including doses, schedules and duration?
- Are the results of less common labs accompanied by normal ranges?

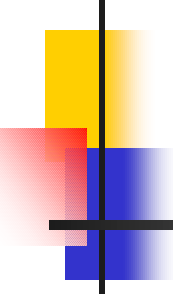


# Clinical Case Reports: CMAJ Expectations 3

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## Comments

- Is the evidence to support the author's diagnosis presented?
- Are other plausible explanations considered and refuted?
- Are the implications & relevance of the case discussed?
- Is the evidence to support the recommendations presented clearly?
- Does the author indicate directions for future investigation or management of similar cases?



# Clinical Case Report: 12 Commandments Clinimetric Criteria

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- Scientific manner in which one needs to examine and present data for a case report
  - Some style and form
  - Some critical distinctions
  - Some more important for publishing than posters
- We will examine these as you prepare your cases