Recommendations for Publishing Clinical Cases

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Abstract

The importance of publishing clinical cases lies in the diagnostic or therapeutic developments they can contribute. This paper mainly aims to guide young doctors in writing and publishing a clinical case. Reflections are encouraged on choosing a clinical case and writing it sharply, briefly, and chronologically to improve the chances of acceptance and publication. Recommendations on how to use the CARE (Case Report Statement and Checklist) are also given.

Keywords

Clinical case, medical education, scientific publication, recommendations, developments.

INTRODUCTION

A clinical case report is the first effort by many doctors and other health workers to convey a message to the medical community through publication in a specialized journal⁽¹⁾. In clinical practice, we frequently encounter interesting clinical cases. When these are presented during a visit or medical review of the service, an inter-consultation, or a clinical meeting, someone usually says: This case must be published!⁽²⁾. Especially in university environments, it is common for a young doctor or medical student to become enthusiastic about a case and decide to present it at a conference or publish it⁽²⁾.

DISCUSSION

Case reports have been described as inferior and correspond to the lowest level of clinical evidence in medicine⁽³⁾. Although the case report cannot replace the power of a clinical trial, it still plays a vital role in the medical literature⁽¹⁻³⁾.

A case report is a different way of transmitting information; writing a clinical case offers an excellent opportunity for young doctors to become familiar with writing a scientific article. Case reports are more likely to be accepted if they provide a message that can change clinical practice. They are also accepted if they contribute something to the

existing literature or pose a novel research question that has the potential to spawn large-scale research⁽⁴⁾.

Clinical cases can be the first evidence of the appearance of a new disease, as occurred in 1817 when James Parkinson published *An essay on shaking palsy*⁽⁵⁾ in London or in 1984 when a French group published *Selective tropism of lymphadenopathy-associated virus (LAV) for helper-inducer T lymphocytes*, describing one of the first cases of acquired immunodeficiency syndrome (AIDS)⁽⁶⁾.

Clinical cases have educational value for authors and readers and are sometimes used to illustrate literature reviews on a specific topic⁽²⁾. Learning to write a case report is a skill that researchers must acquire. A case report is expected to be authentic and thought-provoking. Brevity and clarity are two main requirements for any case report⁽⁴⁾.

A clinical case report tells a story in a narrative format that includes problems encountered, clinical findings, diagnoses, differential diagnoses, interventions, outcomes (including adverse events), and follow-up. The narrative must include an analysis of the foundations of the conclusions and the messages that can be extracted⁽⁷⁾. Clinical case reports are frequent and represent a growing number of articles in medical journals; however, not all have the same quality⁽⁸⁾.

The volume of case reports indexed in Embase and Medline increased by 45%, from 49,918 in 2000 to 72,388 in 2010⁽⁴⁾. In recent years, new journals specializing in case reports have emerged. By mid-2015, there were more than 160 journals specializing in case reports produced by 78

publishers, and many of them dedicated to a specific area of medicine, such as Case Reports in Gastroenterology⁽⁹⁾. It is worth mentioning that traditional journals created journals specialized in clinical cases, such as the British Medical Journal, which created the BMJ Case Report, and, locally, the, which began Case Reports.

During 2011 and 2012, clinicians, researchers, and journal editors made recommendations for accurate communication of case report information that led to the *CARE Statement and Checklist* (Case Report) and were presented at the International Congress on Peer Review and Biomedical Publication in 2013, endorsed by multiple medical journals and translated into ten languages⁽⁷⁾. A case report is much more likely to achieve adequate quality when these reporting guidelines are followed.

There are two modalities for the publication of clinical cases. One is a case description and a discussion relevant only to the reported case. Another includes a literature review; however, many journals do not accept that clinical cases be used as an instrument for a literature review because the presentation of clinical cases and literature reviews have different designs⁽²⁾.

This document and the CARE statement (available at www.care-statement.org) are resources to improve the quality of case reports. With the CARE Checklist as a framework, case report writing remains an art that allows the author to choose the focus of the case and share a patient's record in a way that engages readers and provides information for scientific and educational purposes (**Table 1**)⁽⁷⁾.

Table 1. CARE checklist: statement and checklist (case report)⁽⁷⁾

Component	Characteristics
Title	It should be brief and include "case report" or "clinical case."
Abstract	Introduction, clinical case (findings, diagnosis, intervention, and outcomes), conclusion (including a message)
Keywords	About five health science descriptors (DeCS)
Abstract	English translation of the abstract and keywords
Introduction	A summary of the importance of the clinical case
Clinical case	Description of the clinical case: information, findings, diagnostic methods, diagnosis, intervention, outcomes, and follow-up
Discussion	Argumentation through references of comparisons of the clinical case with what is reported in the literature
Conclusion	It is not always necessary. Personal opinions should not be included.
Informed consent	It is an essential requirement.
References	Between 15 and 20 references, including some from the journal you are submitting the paper or from the same country

Modified from: Riley DS et al. J Clin Epidemiol. 2017;89:218-35.

GENERAL RECOMMENDATIONS

To help authors who want to publish their clinical cases technically and appropriately, we have developed the following proposal with five points to consider as guidance for their preparation and publication.

- 1. When is a clinical case eligible for publication? When it has any of the following characteristics
 - unexpected or unusual manifestation of the clinical case or that constitutes a novelty;
 - atypical manifestation of a disease;
 - unusual association of two pathologies;
 - emergence of a new etiology that clarifies the pathogenesis of a disorder;
 - alteration of a laboratory or imaging test not described in a disease;
 - unusual side effects of a drug (beneficial or harmful);
 - an undescribed drug interaction;
 - use of an innovative diagnostic or therapeutic intervention.
- 2. Before writing a manuscript, check that the clinical case is novel and deserves publication. The process of publishing a clinical case requires much work. One way to check the appropriateness of writing it is to consult with specialists on the subject to get their insights and feedback. This action has risks, such as encountering chronic pessimists, unwanted co-authors, die-hard enthusiasts, and case usurpers. Once the view is positive, conduct a broad literature search through PubMed, Embase, Google Scholar, and case report databases to ensure you obtain all available information on the topic⁽¹⁾.
- 3. Once the decision to report on this case has been made, request the patient's informed consent, an essential requirement for publication⁽¹⁾. We even recommend that this consent be given as soon as you begin to consider the clinical case as publishable; it is better to have it and then not use it than not to have it and face some difficulties in obtaining it later. Everything related to the intention to publish the case for academic purposes and without financial interest must be explained to the patient. Emphasize that the information will be completely anonymized.
- 4. After you have reviewed the literature and improved your knowledge on the subject, use the patient's history to record relevant aspects, examination findings, paraclinical and imaging results and their interpretation, clinical or surgical treatment, and outcomes. Pay special attention to eliminating all personal information to avoid identifying the patient, even in radiological or histopathological imaging⁽¹⁾.

5. The next step will be defining the most appropriate journal for submitting your case report. Each journal provides the required criteria, the proper format for preparing your report, and recommendations that you should follow to improve your chances of being accepted for publication⁽¹⁾.

COMPONENTS OF A CLINICAL CASE PRESENTATION

The word count of a case report may vary from journal to journal, but generally, it should not exceed 1,500 words, so the report's final version should be clear. If the journal requires a shorter version, you can always edit or cut the article's discussion section⁽¹⁾.

Title

The title is "the most important line of a publication"; it must be well thought out and clear. It should give a fair idea of what the article contains. Since it is the most read part, it must be written correctly, precisely, carefully, and meticulously. The title should be relevant, concise, informative, descriptive, and engaging enough to captivate readers. It must always contain the words "report or clinical case presentation" (1,4,10). Authors may write the title when they finish writing the report to ensure it reflects the predominant problem in the case report⁽³⁾.

Most case reports are not prepared by a single author, but it should not exceed four or six authors, according to the indications of each journal; otherwise, the article may be rejected⁽¹⁾.

Abstract

The abstract is the first section the reader finds. It is one of the most critical components of an article, as editors and reviewers will have a fair view of the entire manuscript after reading it and help determine interest in the case report. Depending on each journal, abstracts usually have between 100 and 300 words and condense the content of the clinical case. The title and abstract also facilitate the indexing and identification of cases in electronic databases⁽²⁻⁴⁾.

The abstract of a case report briefly mentions the background in one or two sentences to guide the reader about the relationship between existing knowledge and the case to be published. Second, the case report identifies the focus of the case and summarizes this episode of care. Finally, the abstract should conclude with one or two sentences highlighting the learning, emphasizing a single priority message⁽⁷⁾.

The abstract is usually divided into sections: introduction or background, case presentation, and conclusion.

The background should clarify the importance of presenting such a unique case and subsequently provide a brief description of the patient's clinical condition, mentioning only the crucial details. Finally, the conclusion should be straightforward with the lesson learned and the impact on the interested group⁽¹⁾.

Drafting the abstract after writing the content allows a more accurate reflection of the complete case report (7,11).

Introduction

Writing the introduction and discussion is easier once the clinical case and its annexes have been prepared. After writing the clinical case, it must be presented to the reader (introduction) and then commented on (discussion). The introduction should invite the reader to continue reading the article. Thus, it should be brief, with summarized information about what is known about the topic, and highlight the importance of the clinical case itself. The introduction stresses the most relevant medical literature on the clinical case in a condensed manner⁽⁸⁾. Each statement obtained from the reviewed articles must be cited. In the introduction, the core of the clinical case can be briefly described without providing excessive information or conclusions that make the reader lose interest⁽²⁾.

While some journals ask for an introduction, others prefer that the case description directly follow the abstract. The introduction should provide the required context for readers to understand why the authors published the case report. However, the authors must ensure it is not an extensive literature review⁽¹²⁾.

The introduction usually ends with a one- to three-sentence synopsis of the case that identifies a question or gap in knowledge, the importance of this case, and a single priority message⁽¹²⁾.

Case reports following CARE guidelines should include the following statement: "This case report has been prepared following CARE guidelines" (7).

Clinical case summary

Once you have reviewed the literature and have better knowledge of the topic, record the key points of the history, the findings of the examination, the results of the relevant data and their interpretation, the treatment, and the outcomes⁽¹⁾.

It is better to present the clinical case chronologically, emphasizing what is new so the reader can draw their conclusion⁽²⁾. We suggest preparing a table or figure with a chronology of dates and relevant case data⁽⁸⁾.

Describe the patient's relevant demographic information, avoiding any particular that could lead to personal

identification. It begins with the initial medical condition and chief complaint with a thorough history that includes family, occupational, and social history, drugs, and allergies with sufficient details and explanations⁽¹⁾.

Briefly report the physical examination findings, as well as laboratory results, imaging, and analysis. Describe the differential diagnosis and the rational approach to treatment, including the follow-up and final diagnosis results. The writing must be descriptive, without comments, value judgments, or subjective comments⁽¹⁾. Tables are used to facilitate the reader's understanding of the clinical case. The most relevant laboratory results can be included in the text. When images, such as X-rays, are included, they must be of excellent quality. If aspects that are not identifiable by a non-expert reader at first glance are shown, the relevant detail should be indicated with arrows or asterisks. Figures should be mentioned in the text when the author believes the reader should look at them⁽²⁾. If a series of cases, there are two options: expand on the first case and summarize the others or present several summarized cases. It is advisable to include a table with the salient data of each case⁽¹⁰⁾.

The authors should always state how they have ruled out clinical and histopathological differences and reached the final diagnosis. If applicable, authors should also describe the details of the therapeutic (drug name, dose, frequency, and duration) or surgical intervention. The response to treatment (objective and subjective parameters) must be outlined clearly, without ambiguity^(4,8,10).

Discussion

The discussion is the most critical section of a case report. It should include pertinent medical literature and justification for the conclusion⁽⁴⁾, emphasizing why the case is unusual, what it teaches, or what was shocking to the author⁽¹⁰⁾. The findings should be compared with what is known in the literature and mention why the case presented is different. This section discusses only what is relevant to the case without unproven or unsupported speculation⁽¹⁾.

Comment on whether the case has generated new knowledge and what its practical usefulness could be. Mention the sources of all the included information and clarify that it does not correspond to your reasoning⁽²⁾.

In the discussion, recount the main findings of the clinical case and highlight their particularities or contrasts. Support the diagnosis obtained with clinical evidence and complementary tests and the limitations of this evidence. Discuss how the differential diagnosis was made and whether other diagnoses were appropriately ruled out. Compare the case with other reports published in the literature and emphasize similarities and differences⁽⁸⁾. Generally, at the end of

the article, draw a one-line conclusion containing the main messages that can be extracted from the case report⁽⁴⁾.

The conclusion is not always necessary in a case report⁽³⁾. Giving recommendations should be avoided since it is a case or series of cases⁽⁸⁾.

Compliance with ethical standards

- Informed consent: Patient consent is crucial; it is not only good clinical practice but also mandatory for most journals⁽³⁾.
- Conflict of interest: In this mandatory part, disclose if any financial or commercial interest exists.
- Author contribution: Credit all the people who have contributed substantially to the preparation of the manuscript. The qualification criteria for separate authorship must be strictly followed. The first criterion is to participate in conceptual development, data acquisition, or analysis; then, take part in writing part of the manuscript and, finally, approve the final version of it⁽¹⁾.

References

Include about 15 references, if possible, some from the last five years, but not exceeding 25. If possible, add references from the journal publications to which the article is being submitted or at least from national journals. References must be cited in Vancouver format.

HOW TO TAKE ADVANTAGE OF CRITICISM TO IMPROVE YOUR MANUSCRIPT

Upon receiving the editor's response and the peer reviewers' reports, it is usual to communicate that modifications must be made to the manuscript to be accepted. This is already good news as it implies that the article has not been rejected, giving hope that it will be published.

Although all authors consider our works perfect, expecting them to be accepted unaltered and that reviewers do not request any change is unreal. Reviewer reports will generally suggest changes to improve the quality of the manuscript. Sometimes, they are easy to correct; other times, they require us to invest additional hours.

While some reviewers often use harsh language, they seldom intend to make us feel inadequate and even less insulted. Please do not take the formal aspects of their comments very seriously and instead consider the substantive elements. Since reviewers are never known, there is no point in embarking on controversies with invisible adversaries⁽²⁾.

Once the modifications suggested by reviewers have been made, a new manuscript must be sent along with a letter that responds to all the observations made by each peer. Then, wait for a new notification from the editor informing that the clinical case has been accepted and the probable date of publication⁽²⁾.

RECOMMENDATIONS WHEN AN ARTICLE IS REJECTED

If the editor's letter notifies the rejection of the manuscript, this should not cause frustration; the efforts have not been wasted. Look for another journal to make a second or subsequent attempt. The reviewers' reports will be used to make modifications that will increase the chances of it being accepted this time. If this does not happen, try publishing it in journals with lower demands or subspecialty journals. Likely, the journal to which the article was submitted was not the proper one. For a new option, you can seek help from authors who publish frequently and usually have a "good eye" for choosing the right journal⁽²⁾.

An accurate, carefully prepared, and well-written case report reinforces the medical literature. Therefore, authors must strictly follow the instructions when preparing the draft case report: comprehensive, transparent, brief, and most importantly, capable of contributing to clinical practice⁽⁴⁾.

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