

# Effective medical writing: How to write a case report which Editors would publish

Case reports will always have an important place in medical literature.<sup>1,2</sup> A number of important medical conditions such as acquired immunodeficiency syndrome, adverse effects of fenfluramine and dexfenfluramine in causing primary pulmonary hypertension, parkinsonism, and Paget's disease were initially reported as case reports.<sup>3-8</sup> The words of William Osler, (father of modern medicine) "Always note and record the unusual...Publish it. Place it on permanent record as a short, concise note. Such communications are always of value," are still very true.<sup>9</sup>

The first piece of medical writing which most authors attempt is usually a case report. They come across a clinical condition or perform a procedure which they think is unique and worth reporting. They put it down in words, in the form of a case report and send it to the most reputed journal, thinking that it would help to disseminate their new discovery most widely. But, the journal rejects it, and the same story is repeated many times over till the time the author finally dumps the report.

Authors who wish their case reports to be accepted must pay importance to the following points; what are the different types of case reports? which topic to choose for a report? how to structure it? which journal to send it to? ethical issues as applied to case reports; and common pitfalls and mistakes to avoid.

## TYPES OF CASE REPORTS

Before one starts writing a case report, one must know the different types of case reports that exist. Broadly speaking, clinical case reports can be divided into two categories;<sup>10</sup>

1. Diagnosis related. These include case reports which describe new, rare, or unusual disease; unusual presentation of a known disease; unusual or new etiology for a known disease; new test or method of diagnosis; unexpected association between diseases or symptoms; and diagnostic dilemma or challenge
2. Management related. These include case reports which describe a new, novel, or improved treatment or surgical procedure; a new or rare side effect or complication of treatment; and therapeutic dilemma or challenge.

Besides these two broad categories, case reports can be on other issues such as a positional or quantitative variation of an anatomical structure; cases in which one patient has two or more unexpected diseases or disorders; new possible mechanism of injury; and an unusual injury pattern.<sup>11</sup>

Different categories of case reports require slightly different styles of writing and highlighting key points, therefore authors must be familiar with them.

## WHICH TOPIC TO CHOOSE FOR A CASE REPORT?

Most journals, especially the ones which publish only case reports, provide an extensive list of topic on which they usually accept a report. This is usually in accordance with the broad publication policy of the journal.<sup>2</sup> Other journals including the Indian Journal of Orthopaedics (IJO) where case reports form a small part of the print publication do not provide extensive guidelines, but have some broad rules for them to be accepted.<sup>12</sup> Authors must understand that it is not the rarity or unusual nature of a case because of which it is accepted.<sup>10</sup> Case reports are accepted if they have key learning message which may change or alter practice. They are also accepted if they contribute new knowledge, ideally raising a new research question leading to larger scale research.<sup>10</sup> Novice authors, sometimes by focusing solely on the novelty of a case, de-emphasize the educational value of the report which results it not being accepted. This is something which must be avoided at all cost.

## HOW TO STRUCTURE A CASE REPORT?

Most journals provide authors some broad guidelines about how to structure a case report. More recently, consensus-based clinical case report guidelines have been advocated by Gagnier *et al.*<sup>13,14</sup> Authors planning to write a case report must make themselves familiar with them. Some of the key points for each section of a case report are described in the following sections:<sup>2,10,11,13-15</sup>

### Title

Title should include the word "case report" and highlight the subject of greatest interest which makes the case report worth reporting. Title should clearly state what the case is

really about, because if it is obscure, then readers may not read it at all.

### Abstract

Abstract must briefly mention the rationale of the report, the chief concerns of the patient, the main intervention, outcome, and finally the main learning message from the case report. Great care must be exercised in writing an abstract because most editors and readers would only read this part of the case to form an opinion about it. For case reports, IJO expects its authors to provide an unstructured abstract.<sup>12</sup>

### Keywords

Two to five keywords must be provided. These phrases of words must be carefully chosen so that electronic search of the report is maximized. IJO encourages its authors to also provide Medical Subject Headings terms for all types of articles including case reports to optimize its electronic search.<sup>12</sup>

### Introduction

Introduction must summarize the background and context of the case report. It should include a brief relevant literature review including any landmark papers on the issue. It must usually end with the reason highlighting as to why the case is worth reporting.

### Report

This is the main body (core part) of the case report. In two or three well-laid out paragraphs, authors must present the patient's information, clinical history presenting features, family, social occupational history, clinical examination findings, diagnostic assessment including all relevant investigations, differential diagnosis, if relevant, treatment plan, outcome and patient's progress, followup and complications if any. It must follow a logical sequence and time line.

### Discussion

It must be able to convince the editors and readers that the case is worth reporting. Authors should begin with expanding on the introduction and reemphasizing as to why the case is worth reporting. This must be followed by a focused review of literature narrowing down to the key challenges in the present case. The authors must try to compare and contrast their case with the existing literature. A line about the strengths and limitations of the case report must also be added. Discussion must conclude by bringing out the key take away points from the report and how the evidence can add value to the future clinical practice and research.

Most journals in their guide to authors would provide information about the length, number, and type of figures

and tables, number and style of references, etc., for a case report. For example, the IJO encourages authors to stick to a length of 1000 words excluding the references while submitting a case report.<sup>12</sup> Authors must go through the guide to authors and journal policy before submitting their work to a particular journal.

### WHICH JOURNAL TO SEND A CASE REPORT TO?

Authors planning to submit a case report for possible publication must understand that case reports have one of the highest rates of rejection. The most obvious reason is that they are one of the most common forms of medical writing that is received by journals which always have limited print space. The other reason is that the level of evidence generated by them is low while journals prefer high-level evidence articles. Third, case reports are low on an editor's priority because they are rarely cited and therefore do not help to improve the impact factor of a journal which is one of the key matrices by which the quality of an indexed journal is accessed.<sup>15</sup> However, if an author feels that his/her report has something unique which can change practice, he/she should not be deterred by these issues and must diligently continue with his/her endeavor. Besides the more established journals, there are several new online journals such as BMJ Case Reports,<sup>16</sup> the Journal of Medical Case Reports,<sup>17</sup> Clinical Case Reports,<sup>18</sup> Cases Journal,<sup>19</sup> and Journal of Orthopaedic Case Reports<sup>20</sup> which publish case reports.

### ETHICAL ISSUES AS APPLIED TO CASE REPORTS

Patient's informed consent must always be taken and patient's confidentiality and privacy must be maintained. Based on the journal guidelines and local institutional policies, ethics committee or institutional review board approval may be required. Like in any type of medical writing, common ethical issues such as authorship, plagiarism, fabrication and falsification, and conflict of interest issues must be taken care of.<sup>21,22</sup>

### PITFALLS AND MISTAKES

At the end of writing a case report, the author must go through it very carefully and see if "the rule of Cs" has been followed.<sup>2-15</sup> The "rule of Cs" is that a case report should be Clear, Concise, Coherent, and must Convey a Crisp message. Some of the common pitfalls that need to be avoided are as follows:

- Authors must understand that a good case report is not the one which highlights a rare condition but the one that has a clear message that can be generalized, and is relevant to many other clinicians

- Authors must be very clear about the one single learning point they want to highlight. Trying to put too many ideas only confuses the readers and turns off the editors
- Before claiming rarity or uniqueness, a thorough literature search is mandatory. Sometimes, in their zeal to publish, authors write a case report on a topic which is all too well known and then feel dejected once it is rejected
- The length, structure, and format of a report must be according to the journal to which the authors wish to submit their report. Always go through the guide to authors and previously published case reports of the journal to familiarize with the style of the journal
- One must understand that the level of evidence generated by a case report is pretty low and therefore authors must avoid making firm judgments and sweeping recommendations based on speculation. Conclusions must be justifiable and evidence based.

The IJO stopped accepting case reports from January 2016. This was a temporary step to clear the backlog of case reports which had accumulated over the years. The journal publishes two to four case reports in every issue and now the backlog is significantly reduced and we have started accepting them. The editors hope that the present editorial would help authors write case reports which are readily accepted and avoid disappointments which happen, if ones work is rejected.

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