

## Editorial: Elements of a Case Report



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Case reports are a vital link to providing unique medical information, procedures or just simply sharing an important medical finding with one's colleagues. Many times, case reports stimulate further interest in taking that next step and doing more involved research on a topic. As a physician and surgeon, there are frequent occasions when we encounter a unique condition, pathology report or surgical condition that entices our interest. Medicine and surgery should not be 'routine' and 'boring', but rather a daily stimulation. In this digital age, it is important to carry a digital camera and capture these events as they unfold. Once these events are captured, a case report is a great way to share this information with one's colleagues. Uniqueness is not a prerequisite to writing a case report, but rather, any information that one finds useful or important can be presented.

In order to write a good case report or study, some fundamental essentials are required. Journals differ in their respective formats when publishing case reports, but some fundamentals remain constant. A *case report* is described as a single report that includes an abstract, introduction, case presentation, discussion and conclusion.<sup>1</sup> Often, the discussion and conclusion can be combined into one narrative. *Case studies*

are writings that include a few case reports with similarities.<sup>1</sup>

Before we begin discussing the elements of a case report, there are a few things to consider and discuss. When the author sets upon the task of writing a case report, one should consider the important points of a presentation. This includes finding a rare case or new surgical technique, doing a thorough literature search and collecting information related to the case.<sup>2</sup>

Getting consent from the patient to use pictures and information in a case report is important and required for most journals. One can get pre-printed consent forms directly off the internet or produce your own document. A simple document containing information about the case, release of photographs and slides and release of medical information is usually adequate. Have the patient sign this document and keep the contact information handy for future reference. One can also add in the document that the patient's name and personal information will not be included in the published report.

Once these conditions are set in place, one can begin the task of collecting information, writing and summarizing the

case report. The entire process is concluded after submitting the case report to a journal, editing/revising the work and publishing the final draft.

Case reports should be concise and short and present 'quality over quantity.' The case report is not a literary dissertation and should not include every review reference from the literature. Along with the elements of the case report, it should include high definition photographs, preferably in color to help present and supplement the case. Drawings and illustrations are also acceptable. Photos, tables and graphs should help to illustrate the case presentation. A common mistake is to repeat the captioned figure text that is already in the main body of the manuscript. Use the main body text to reference photos, tables and graphs and use the figure caption to summarize the information already described in the text. Do not repeat information verbatim in your main text that is already in a table.

Do not simply narrate an operative report of the surgical case. The case report is not a lesson in operative dictation. Proper terminology is important in describing the surgical technique as it reflects in the case report. Include information that helped improve the technique and report any complications one may have found during the surgical procedure. Reporting unexpected conditions or complications is just as important as reporting and supporting the expected outcomes.

Now, let's discuss the elements of a case report.

## **Abstract**

The abstract is not a formal component of the case report, but serves to introduce and summarize the written work. It should be concise and include the main 'points' of the case report. The importance of the abstract should not be underestimated. It is the first few lines the audience will read and will serve to entice the reader to continue reading the case report or study.

## **Introduction**

The introduction of a case report should provide the reader with a general overview of the case or condition presented. Introductions vary from one journal to another. Some journals recommend a historical perspective of the case, disease or procedure that includes referenced material.<sup>3</sup> Other journals recommend a description of the case to be reported, and a statement about the uniqueness or unusual nature of the condition or treatment being described.<sup>4</sup> Some simply recommend a one sentence description of the case.<sup>2</sup> Whatever method one chooses, there are a few questions the author should ask. Is the rationale for reporting this case adequately explained and is the rationale sustained by references?<sup>1</sup> Has the condition or technique been described before? A good introduction will drive the point home: What is the single most important point in making this case? What am I trying to communicate with my audience? A common mistake in the introduction is to begin the discussion of the case before the entity or point of your case is made. The introduction is also used to introduce background information on a product, surgical entity, pathology or condition.

## Case Report

The purpose of the case description is to allow the reader to understand the case and all its pertinent findings. The case report should include all elements describing the case. This includes the patient's age, gender, initial presentation and chief complaint, symptoms, medical history, social history, medications and notable physical findings. It should also include conservative treatments, treatments that worked and didn't work, laboratory data, supportive radiographic information, pathology and histology reports. It can conclude with the differential diagnosis, final diagnosis, treatment and outcomes. If there is an unusual laboratory finding, include the normal values. To keep things brief, only report the positive findings. If the patient has a normal medical history, this may be mentioned without going into the normal results of the examination.

In this section, digital photographs, drawings, graphs and tables in the form of *figures* can be used to describe the case report. In surgical cases, pictures including before, during and after surgery are encouraged. Pictures showing long-term outcomes are also helpful.

Do not use patient initials in your text. Refer to the person in the case report as "the patient" or "Patient X" rather than "this case". A case refers to an instance in disease, a patient is a person.<sup>1</sup> Keep the information in the case report interesting, educational and pertinent.

## Discussion

The purpose of this section is to explain anything that wasn't clear in the introduction and discuss the findings and

interpretations. The discussion brings together the introduction and case presentation and introduces the "discovery" about the case report that makes it unique. This is the place to include a brief literary review of the findings. One can describe what others have written about this condition or technique.

This is also where the interpretation of findings is presented. The author should discuss the positive and negative findings both documented in the literature and something new that may have been discovered. The discussion paragraph is the place to truly explain the case and provide new information that the reader will find useful. Discuss expected and unexpected outcomes. How did this case differ from the norm? How did a particular technique affect the outcome? Were there any lessons gained in the discovery?

The discussion can end with a conclusion that briefly recounts the case report findings. Some journals will have a separate conclusion paragraph that simply restates a summary of the case report.

In summary, the case report is a great way to communicate information with one's colleagues. A good understanding of these elements will help the author write a readable case report. In this day and age of the internet, publishing also allows one to reach a wider audience and the general public. It is also an asset to the author's curriculum vitae. Writing a good case report helps contribute to our understanding of selected surgical techniques, complications, interventions and unique conditions that affect the foot and ankle.

**References:**

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3. Joseph, W. Guidelines for Authors. JAPMA 97:1, 89-91, 2007.