

Ten Steps to Writing an Effective Case Report

A case report is a detailed report of the symptoms, signs, diagnosis, treatment, and follow-up of a patient. Case reports may contain a demographic profile of the patient that usually describes an unusual or novel occurrence.

Step 1: Identify the Category of Your Case Report

- An unexpected association between diseases or symptoms
- An unexpected event in the course of observing or treating a patient
- Findings that shed new light on the possible pathogenesis of a disease or an adverse effect
- Unique or rare features of a disease
- Unique therapeutic approaches
- A positional or quantitative variation of the anatomical structures

Step 2: Select an Appropriate Journal

- **Journal selection** should be based on the type of Case Report. Example: Unusual injury presentations are more likely to be accepted in journals such as *Trauma*, rather than more mainstream, general-interest journals such as *British Medical Journal*, which does not publish Case Reports but does publish a lesson of the week Lesson of the Week.
- Another important point with respect to journal selection is that it is extremely important to follow the basic format required by the journal. Your case report may be rejected because it does not conform to the **standard format**, no matter how appropriate the content. Therefore, **formatting** such as margins, spacing, figure numbering, and style of references (AMA, APA, etc.), are all important.

Step 3: Structure Your Case Report According to the Journal Format

Example: A suggested outline of sections for a case report is listed below.

- *Abstract/Summary*
- *Case Presentation*
 - *Patient's Examination/Identification*
 - *Medical History*
 - *Analysis of test results*
 - *Appropriate plan and analysis*
- *Differential Diagnosis*
 - *Support for conditions considered*
 - *Support for additional investigations*
- *Pathophysiology*
- *Treatment/Patient Management*
- *Discussion*
 - *Etiology*
 - *Epidemiology*
 - *Prevalence*
 - *Complications*
 - *Prognosis*
 - *Ethical Dilemmas (if any)*
 - *Conclusion*

Step 4: Start Writing

So, how do you begin? A case report is a way of **communicating information** to the medical community about a rare or unreported feature, condition, complication, or intervention by publishing it in a medical journal. Decide whether your case report is publishable. This can be decided based on the following criteria:

Does your case report,

- Describe rare, perplexing, or novel diagnostic features of a diseased state?
- Report therapeutic challenges, controversies, or dilemmas?
- Describe a new surgical procedure?

- Report how a drug can enhance a surgical procedure?
- Report new medical errors or medication errors?
- Describe rare or novel adverse drug reactions?
- Describe a therapeutic failure or a lack of therapeutic efficacy?

You should also ensure that you adhere to the following points:

- Do an extensive literature search—PubMed, Medline, Ovid, Embase, and search engines like Google will give you a vast amount of information related to your topic.
- Narrow down the search to your actual topic
- If this comes up with very few search results, it means (assuming your search method is correct) that the case is rare, and the report is therefore more likely to be published.

Step 5: Collect Information Related to the Case

- Use the patient's notes to record the details of all the events in the patient's care—history, examination findings, results of investigations with dates, and operative findings, if any, together with the details of the actual interventions and follow-ups.
- Use copies—do not take the originals of radiographs, photographs, etc. They are the patient's or preceptor's only records for future reference.
- Verify all patient data such as history and dates of examination with the preceptor again to make sure you have got the facts right.

Step 6: Deciding the Contents of the Case Report

Summarize the information that you have gathered:

- A brief history and important and relevant positive and negative findings with details of investigations
- Treatment
- The condition of the patient after treatment

Example: A common form of presentation is to divide the content into a textbook style of presentation without the headings—history, examination, investigation, treatment, and outcome in separate paragraph

Step 7: Writing the Introduction

Follow the rule of brevity! State the issue and its significance. You can cite some articles that have already referred to this problem.

Tip 1 Do not forget to mention how rare the condition is.

Step 8: Patient Data and Case Description

- Since a Case Report is usually about a single or a group of patients, this section plays a very important role in the write-up. Patient consent is a very crucial point and should compulsorily be mentioned. Obtaining consent from the patient is not only a good medical practice but also mandatory for most journals, such as *BMJ* (which has its own consent form on the **journal's website**).
- The case is usually described in chronological order.

Tip 2 Provide the results of the relevant examinations and laboratory tests, usually only those with positive results.

Step 9: Discussion and Conclusion

These sections are written differently from those in other types of research articles.

Proceed point-by-point when writing the **Discussion**:

- First, explain the objective of reporting the case.
- Describe what others have written before about the condition or any related feature.
- The most important point to note is that your reviewers want proof of the rarity of the condition and the scientific explanations for it.

Example: Answer these questions in the **Discussion** section:

- Describe the cause of the condition or why a particular procedure or feature was chosen.
- How did it influence the outcome?
- How does it differ from the usual and what are your recommendations?

- Are there any lessons to be learned?

The **conclusion** should be a few summarizing sentences.

Step 10: References and Other Formatting

The reference section is extremely important. Adhere to the style (AMA, APA, etc.) that your journal requires. Also, as mentioned previously, the **formatting** will affect the acceptance of your report. Therefore, take care of all **formatting instructions** related to margins, spacing, figure numbering.

The Stages in Writing a Case Report Can Be Summarized as Follows:

Introduction

Content should be brief and less than 3 paragraphs:

- State the purpose of the case report
- Provide background information and pertinent definitions
- Introduce the patient's case

Patient's Case Presentation

Ensure that the patient's case presentation provides enough detail for the reader to establish the case's validity.

- Patient demographics (age, sex, height, weight, etc.)—avoid patient identifiers (date of birth, initials)
- Patient's complaints
- Patient's present illness and medical/family/social/medication history before admission
- Each drug's name, strength, dosage form, route, and dates of administration
- The completed diagnostic procedures that are pertinent and support the case and their salient results.

- Photographs of histopathology, roentgenograms, electrocardiograms, skin manifestations, or anatomy
- Patient consent and adherence to institutional guidelines

Discussion

Justify the uniqueness of the case in this section.

- Compare and contrast the nuances of the case report with the literature review
- List the limitations of the case report and describe their relevance
- Confirm the accuracy of the descriptive patient case report
- Summarize the salient features of the case report
- Draw recommendations and conclusions

Conclusion

This section should be brief and not exceed one paragraph.

- Provide a justified conclusion
- Provide evidence-based recommendations
- List opportunities for research

Compiled from information found at <https://www.enago.com/academy>