

From the editor's desk: Why still write a case report?

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Case reports remain an invaluable resource in the literature, and they continue to serve an equally important role in scientific advancement. They record discoveries, report the unexpected, and spark further research. Preparation of a case report can be a great learning experience, especially for medical students, residents, and young physicians. It serves as an excellent introduction to academic writing, familiarizing them with all aspects of publishing, from a structured case presentation and literature review to submitting and revising a manuscript. It can also stimulate an interest in a specific topic and gradually lead to more involved and complex academic endeavors.



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A case report is a written communication that makes a unique contribution by presenting an unknown or unrecognized entity. The unique contribution may arise from the description of a new disease, treatment, or procedure (1); alternatively, the case report may focus on the description of a previously unrecognized manifestation of a known

entity (2). The content of the case report does not need to be restricted to rare (3-5) and obscure entities as long as it makes a clear point and has the potential to educate and improve clinical practice (6-8). In this editorial, we aim to revisit the known value of the case report and describe its importance in the era of evidence-based medicine.

Case reports in the form of reported observations have been around for centuries, and used to be the single most important means of knowledge dissemination and scientific advancement (9). In 1605, Francis Bacon pointed out the loss to medicine of the failure to report a unique case (10). Observation and critical thinking inspired by case reports have led to some of the most significant discoveries in the field of medicine, and we refer to numerous entities by the name of the scientist who first described them. As an example, Pierre Paul Broca's observation of expressive aphasia in patients with frontal-lobe lesions led to the connection of speech with the inferior frontal gyrus (11).

In recent years, with the rise of evidence-based medicine, case reports have fallen out of favor. Case reports take up valuable space in a printed journal, apparently without a significant effect on its impact factor (12). Authorship abuse, in terms of considering case reports a convenient approach to accumulate publications (10), and limited ability to generalize from a single observation have also been criticized (12).

Nevertheless, case reports remain an invaluable resource in the literature. Before an idea can be tested and proven, it must first be discovered (13). While case reports lack the evidence-based rigor of clinical trials, they serve an equally important role in scientific advancement. Case reports remain the first line of evidence, and they can be the spark to generate a hypothesis and further research (14). Case re-

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ports allow a forum for reporting of the unexpected, which can lead to new ideas and progress.

The case report is a concise form of contribution to the scientific community. Unlike clinical trials, case reports can be published quickly, especially by a seasoned author (15). Therefore, case reports might be particularly appealing to a clinician with a heavy schedule and a desire to share his or her experience. Every case report adds a new piece of information to current medical knowledge and can challenge prior observations and beliefs. Case reports may be a valuable resource for fellow physicians in their practice; and, in fact, case reports can be compiled into case series, and case series can be analyzed to derive numbers and conclusions about diseases and phenomena (6, 7).

Preparation of a case report can be a great learning experience. For seasoned clinicians, case reports offer an opportunity to teach and provide mentorship. For medical students, residents, and young physicians, presenting a case report serves as an excellent introduction to academic writing (7). The less experienced author will become more familiarized with all aspects of publishing, from a structured case presentation and literature review to submitting and revising a manuscript. In the process, one might discover a new appreciation for research, which can lead to more projects and submissions (16). Preparing a case report can stimulate an interest in a specific topic and gradually lead to more involved and complex academic endeavors (17).

Case reports can have a significant impact on the reader as well. They represent a valuable resource for learning—not only about rare diseases, but also about unknown manifestations of common entities and unexpected findings in general. The scope of a clinical trial is to answer a specific question and investigate a limited number of parameters. On the other hand, a structured case presentation can offer a complete clinical scenario and discuss interesting findings and occurrences (15). In this sense, case reports might hold more educational value for the individual reader. They represent an alternate way of absorbing new information and can have a memorable impact (18).

Case reports can be of particular value in the specialty field of radiology. Through technologic progress, radiology is rapidly evolving and plays a crucial role in modern medicine. Advances in imaging modalities and protocols offer abundant opportunities for case presentations and publication. Rare entities are imaged for the first time; established radiologic signs are identified on new modalities (19); diseases and their manifestations are recognized with a novel approach (20); and new methods are constantly developed to improve diagnostic and therapeutic accuracy. Radiology case reports bring a "visual perspective" to an interesting or rare entity. In addition, by the virtue of discussion of the relevant differential diagnosis, they are a great tool to help problem-solve a difficult case in clinical practice.

With the above points in mind, we welcome and encourage manuscript submissions on our online open-access journal *Radiology Case Reports*.

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