



Two cheers for case reports

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There's never a new fashion but it's old.

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The case report was once a staple of medical journals, but until recently it lay buried at the bottom of the evidence-based medicine hierarchy in a pauper's grave. The evidence-based medicine paradigm has privileged the randomized controlled trial (RCT) and its larger cousin the meta-analysis over other "lesser" forms of clinical evidence such as the case report. The reasons for the rise of the RCT, its strengths, and its limitations have been discussed elsewhere.^{1,2}

Similarly the advantages and disadvantages of case reports have been well described and discussed.³ The pitfalls of case reports are many and include their lack of generalizability; their inability to show cause and effect; the danger of overinterpretation of a single case or even a case series (the so-called *anecdotal fallacy*); publication bias (as with RCTs, medical journals tend to publish case reports with positive outcomes); the lack of explicit criteria in many journals⁴; and the lack of relevance or an emphasis on the rare. The last flaw has been a particular feature of many of the case reports that *Canadian Family Physician* has published in the past, most of them being submitted by specialists focusing on rare presentations of conditions rarely seen in family medicine.

Over the past decade the case report has come into its own again, as reflected in the number of medical journals exclusively dedicated to publishing case reports. The first international, PubMed-indexed medical journal publishing only case reports was launched in 2007,⁵ and several others have been established since.⁶

Case reports still resonate powerfully with clinicians because of their strengths. Case reports are a fundamental scientific tool in detecting novelty and in hypothesis generation. Perhaps the main advantage of case reports is their capacity to detect novelties. The case report is the only means by which unusual, uncontrolled observations about symptoms, clinical findings, the natural history of an illness, or the complications of treatments or interventions, for example, can be presented to readers.³ There are many examples of new discoveries or advances that began with a case report or, as in the discovery of the congenital abnormalities caused by thalidomide, a letter to the editor in *The Lancet* in 1961.³

Among the other advantages are that case reports or case series are useful when other research designs

are not feasible; the narrative approach of case reports facilitates a deeper understanding (some journals such as *BMJ Case Reports* include the patient experience as part of the narrative); case reports have deep educational value (how else to explain the endurance of the Case Records of the Massachusetts General Hospital in the *New England Journal of Medicine*?); and for many physicians, especially family physicians, case reports are the gateway to clinical discovery and research, as Ian McWhinney has so eloquently identified.^{7,8}

Recognizing the continued value of case reports, *Canadian Family Physician* is relaunching them in 2015, but with an emphasis on the family medicine perspective. As readers and contributors will see from our new guidelines (www.cfp.ca/site/Authors/Guidelines.xhtml), we welcome case reports submitted by medical students, family medicine residents, other health professionals, and family physicians working in family medicine settings. Case reports can be written in collaboration with specialist colleagues when relevant, but the lead author should be working in a family medicine setting. Cases can include unusual or unexpected presentations of commonly seen illnesses; new associations or variations in disease processes; presentations, diagnoses, or management of new or emerging diseases; an unexpected event in the course of treating or observing a patient; unreported or unusual adverse effects or interactions of medications; or a novel or useful approach to managing patients with complex chronic conditions, to give some examples. Family practice is full of opportunity for discovery, and we invite case report contributions that explore that fertile ground. 🌱

References

1. Riley D. Case reports in the era of clinical trials. *Glob Adv Health Med* 2013;2:10-1.
2. Yitschaky O, Yitschaky M, Zadik Y. Case report on trial: do you, doctor, swear to tell the truth, the whole truth and nothing but the truth? *J Med Case Rep* 2011;5:179-80.
3. Nissen T, Wynn R. The clinical case report: a review of its merits and limitations. *BMC Res Notes* 2014;7:264-71.
4. Sorinola O, Olufowobi O, Coomarasamy A, Khan KS. Instructions to authors for case reporting are limited: a review of a core journal list. *BMC Med Educ* 2004;4:4-9.
5. Kidd M, Hubbard C. Introducing *Journal of Medical Case Reports*. *J Med Case Rep* 2007;1:1.
6. Kidd MR, Saltman D. Case reports at the vanguard of 21st century medicine. *J Med Case Rep* 2012;6:156.
7. McWhinney IR. Assessing clinical discoveries. *Ann Fam Med* 2008;6(1):3.
8. Pimlott N, Upshur REG. From clinical observation to clinical discovery. The challenge for family medicine research. *Can Fam Physician* 2014;60:14-6 (Eng), 27-9 (Fr).

Cet article se trouve aussi en français à la page 967.