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Imagine if you will: you have removed the testis and cord of a 55-year-old and are popping onto your EMR to review the pathology when you see it, “Eosinophilic infiltrate with histiocytes and monocyte-lined pseudocapsule.” A bagel-caked Grinch smile widens. A medical student in another clinic in another building shudders inexplicably. Seven days’ gestation and it’s born: 12-pt Calibri. Margins 1.5 cm. Double-spaced. 2940 words. “Eosinophilic infiltrate with histiocytes and monocyte-lined pseudocapsule of the testis: A case report.”

You don’t have to imagine. This is a classic hurdle in the aspiration gauntlet for trainees, and the chaff that grows attendings’ CVs three sizes. You coolly tell your Facebook Aunt that just because someone had a heart attack a week after a vaccine doesn’t mean the vaccine *caused* it, then switch windows back to Word to explain why a patient with an ACL tear after 18 months on funkalutamide is a compelling reason to counsel patients against sports 16–20 months after starting funkalutamide. Your editor is here with a thought experiment: what if you *didn’t* write it up and simply continued living your life?

Ok, too dark! And patently wrong. Rare things occur commonly (!) and can be informative, helpful, and revealing of previously unseen mechanisms and sequelae. I get it! Rare diseases (and those they impact) go unrecognized unless someone is motivated to write about it. New imaging interpretations add to differentials and expand our diagnostic umbrella in the service of our patients. New approaches to surgical technique create efficiencies or mitigate against complication. New complications, signs, or symptoms improve physicians’ thinking or reveal themselves as sentinels in otherwise baffling or frustrating clinical situations.

I can’t question the value of shining light into these unseen corners but I’m here to say that it’s not clear that the status quo of sprinkling unstandardized, half-baked cases throughout the peer-reviewed literature is serving these virtues. They’re hard to find and collate and the information they contain varies massively in portability and usefulness.

Archetypal case reports have a few characteristics. One group is the unexpected finding after a routinely managed case (see the made-up testis histology above). Occasionally, a pathology slide is served alongside, but rarely any other data. The patient is afforded a few weeks of followup (because the manuscript is borne of the surprise pathology report at the postoperative visit) and the case is briskly written. Another group is the rare complication or adverse event. Followup is similar, but care is taken to remind the reader that the patient’s sorrows originated “at an outside institution.” Long-term outcomes are rarely presented; the case is not parked at discovery and revisited a year later; rather, the paper is conceived and submitted hastily. A moderate-length review article serves as the discussion, often curiously tangential to the core discovery of the case. Reports of dozens of prior instances are oddly missing from the references. Critically, future users are left without a sense of how they ought to modify their future behavior as a result of this case. They don’t know how it really turned out, or if they could avoid or plan for the next instance.

An aside — case report authorship is invariably downloaded upon trainees. This is ostensibly because writing a case report is a “good introduction to research, academic writing, and publication.” Prepare your mantle for a CanMEDS Scholar award! This is untrue. Case reports are more akin to organizing one’s thoughts for patient handover, multidisciplinary rounds presentation, or M&M reporting — all important in trainee development (prepare your mantle for a CanMEDS Collaborator award!). Writing a case report is completely unlike conducting an academic study or pulling together a research manuscript, outside the literature review and submission hoops. Case reports offer quick turnaround, essential in time-limited application cycles like CaRMS or fellowship. They offer lines on CVs for applications or promotion, where bulk matters to some adjudicators. Think for a moment: if the nut of the PubMed ID disappeared, what would happen to case reports? What *should* happen?

We can agree that reports of rare scenarios are worthwhile and in aggregate can be helpful. Can we imagine a better forum for them than the current model, one that helps make these one-off discoveries most useful? Some centralization and standardization would help. There are myriad registries at provincial, national, or organization levels. Cancer registries are ubiquitous. Our pediatric oncology colleagues have shown the way in registry development for rare diseases for decades. Uploading our rare findings to these in a standardized way would allow aggregation and comparison much more effectively than playing with search queries and myriad manuscript formats on Google Scholar. In the real world, however, these registries are siloed and gated; the single interface is not in the mail. We do have unified MEDLINE searches, however, so the indexed journals seem the logical home for case reports at present. We are, therefore, tasked implicitly with making them as useful as we can. This probably means fewer (and definitely means better) reports with clarity of purpose, narrative, and usefulness.

A good case report is, of course, novel, but that's not enough. It must be *useful*, in that the reader's thinking is changed when encountering a similar situation, and it should *matter* to patients' prospects. If it's a rare complication, make the case for modifying one's approach to prevent, recognize, or respond in the future. If it's a post-hoc discovery of an odd histology, set expectations over a meaningful timeline and articulate a playbook for next steps. The title and keywords should aid others' searches. The narrative should be terse and compelling enough to be both memorable and obviously true, and any tacked-on literature review should be brief and on-point. The logic of decision-making and the crossing off of other causes should be explicit. We expect this of those reporting to us in clinic or consultation, and the same should apply to writing. Finally, this is all aided by *receipts* — imaging, photos, pathology, and labs over the relevant timeline are massively valuable as the anchors or signposts clinicians will recognize in the future.

I consider these as standards when I encounter case reports as a reviewer and editor; consequently, I reject most of them. The debate over case reports is evergreen in editorial team circles, as they seem to ride a wave between colloquial interest and bloat to the impact denominator. If we want to tell good stories and improve care, we can maximize the former, the latter come what may. I suggest spending the time to address the above paragraph as a sort of checklist, with item zero being, "Does this case report really need to happen?" I'm not fond of this kind of discouragement, but I am fond of adults spending their precious time well. Just because it's candida *glabrata* in a nephroureteral tube instead of albicans in a nephrostomy doesn't make it worth a Saturday — yours or a reviewer's. Have a look at the three examples I'll reference below: recent reports that tick these boxes with receipts, resolution, and insight.¹⁻³ I'll look forward to an era of case study in *CUAJ* that sets the standard for others and both entertains and equips our members.

References

1. Orzel B, McCarthy J-P, Rent, K. Case — Laparoscopic excision of the right testicular vein post-varicocele embolization and coil erosion. *Can Urol Assoc J* 2021;16:E51-3. <https://doi.org/10.5489/cuaj.7343>
2. Dharia A, Sridhar V, Perlis N, et al. Case — Reflex anuria: A rare complication of retrograde pyelography. *Can Urol Assoc J* 2020;15:E380-2. <https://doi.org/10.5489/cuaj.7036>
3. Ross JPI, St. Denis-Katz H, Zhang J, et al. Case — Persistent vesico-cutaneous fistula in an "hour-glass" deformity ileocystoplasty: Successful repair using abdominal wall perforator flaps. *Can Urol Assoc J* 2020;15:E373-5. <https://doi.org/10.5489/cuaj.6894>

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