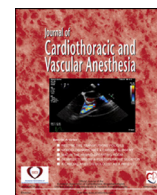




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## Journal of Cardiothoracic and Vascular Anesthesia

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## Editorial

## The Qualities of a Superlative Case Report



IN THE era of evidence-based medicine, case reports seem to have fallen out of favor. Despite the lack of interest shown by some leading journals, the scientific community at large recognizes case reports as an accepted method of conveying clinical and educational value to a wider community. Some even believe that case reports often remain the first line of evidence and “this is where everything begins.”<sup>1</sup> The important role played by case reports in the development and advancement of medical science is well-known and those that have influenced the advancement in anesthesia already have been summarized.<sup>2-4</sup>

The impact factor of a journal is used by authors and publishers to judge its quality; however, it should not be forgotten that it is the readership for whom the journal is meant, and not the assessors or evaluators of a journal. In this respect, I doubt many readers wish to know the impact factor before they pick up a journal to read. The majority of readers are interested in having access to the scientific material that is informative, educational, and up-to-date. These, along with the belief that case reports that benefit patient care should be published regardless of whether they will be cited, have led many journals to continue to publish the case reports, albeit at a reduced number. It is apparent that the debate on the subject still is ongoing since a PubMed search using the keywords “case reports, should they be published” revealed a total of more than 12,000 publications during last five years. It seems therefore, that the jury still is out on the subject.

The *Journal of Cardiothoracic and Vascular Anesthesia* (JCVA) publishes 12 issues per year since 2019 (earlier six issues/year) and has continued to publish case reports. **Table 1** shows the trend in publication of case reports in the JCVA. Overall, although the number of case reports submitted has increased, there is a significant decrease in the percentage of case reports published (out of total case reports submitted, as well as out of total articles published) during the last five years, with only around 10% of the total published articles constituting case reports. The policy of the JCVA Editorial Board has been to publish a limited number of the best and most unique case reports, and I believe it is time for me as the section editor to highlight what JCVA looks for in a case report. The Journal seeks case reports on all topics related to

cardiac, thoracic, and vascular anesthesia, including critical care, pain management, and perfusion technology. It would be worthwhile referring to the CARE check list (for CASE REports), which has been developed by an international group of experts and endorsed by several medical journals and publishers (**Table 2**).<sup>5</sup>

If you think you have an interesting case worth publishing, as the initial step, an extensive literature search should be performed to establish the novelty or uniqueness of the case. If the information that you wish to report already exists, your case is not unique. Hence, a thorough literature search to identify what is novel or educational in your report is mandatory. “Me-too” cases are not of interest unless the authors can provide the justification for this report. For instance, a report of epidural hematoma after thoracic epidural analgesia during cardiac surgery was considered novel until 2004 when the first report was published,<sup>6</sup> but over the years several other similar cases have been reported. Hence, the novelty of such a complication has been diluted, and not worth publishing again, unless there is some new educational point from your case.

Creating a good case report requires much more than just an interesting case. In essence, a case report worthy of reading should contain useful new clinical advice. One describing clinical management below the standard of care is not acceptable. The case report should be original, factual, focused on an event that you wish to report, with a succinct description without any exaggeration; every inch of the paper counts. The report should be a chronologic summation of salient aspects of the case including illustrations, figures, and tables whenever useful. In doing so, ensure that the patient identity is concealed.

The title of your article should be concise and make a statement, rather than ask a question. For instance, “Management of a patient with severe aortic stenosis (AS) with cardiac failure using extracorporeal membrane oxygenation (ECMO) during transcatheter aortic valve replacement (TAVR)” could be better written as, “Successful outcome using ECMO in a patient with severe AS and cardiac failure undergoing TAVR.” Case reports or case series that can generate hypotheses and provide an impetus for further investigation and research are given the highest priority. Case reports describing rare

Table 1  
Trend in the Publication of Case Reports Over the Years in the *Journal of Cardiothoracic and Vascular Anesthesia*

Year	Number of Case Reports Submitted	Number of Case Reports Published (% of Total Case Reports Submitted)	Number of Total Articles Published	Case Reports Published as Percentage of Total Published Articles
2005	106	39 (36.7)	198	19.6
2006	139	55 (39.5)	222	24.7
2007	127	59 (46.4)	237	24.8
2008	134	54 (40.2)	222	24.3
2009	150	38 (25.3)	219	17.3
2010	151	31 (20.5)	227	13.6
2011	153	40 (26.1)	320	12.5
2012	159	32 (20.1)	275	11.6
2013	187	32 (17.1)	303	10.5
2014	167	37 (22.1)	337	10.9
2015	197	48 (24.3)	353	13.5
2016	216	66 (30.5)	348	18.9
2017	217	54 (24.8)	459	11.7
2018	217	41 (18.8)	549	7.4
2019	215	65 (30.2)	641	10.1
2020	338	54 (15.9)	659	8.1
2021 (to date)	119	*	*	*

NOTE. Twelve issues per year since 2019, earlier six issues per year.

\* Data still under process.

complications and suggesting novel solutions to clinical problems also are important. However, airway complications during thoracoscopic surgery that have been reported previously during open thoracic surgery are not novel. Likewise, use of

ECMO before induction of general anesthesia in a patient with a large thyroid compromising the airway is no different from a patient with a large mediastinal mass compromising the airway. It also would be useful for the authors to review case

Table 2  
CASE REport (CARE) Checklist for Case Reports

Topic	Item	Checklist Item Description
Title	1	The diagnosis or intervention of primary focus followed by the words “case report”
Keywords	2	2 to 5 keywords that identify diagnoses or interventions in this case report including “case report”
Abstract (no references)	3a	Introduction: What is unique about this case and what does it add to the scientific literature?
	3b	Main symptoms and/or important clinical findings
	3c	The main diagnoses, therapeutic interventions, and outcomes
	3d	Conclusion—What is the main “take-away” lesson(s) from this case?
Introduction	4	1 or 2 paragraphs summarizing why this case is unique (may include references)
Patient information	5a	De-identified patient specific information
	5b	Primary concerns and symptoms of the patient
	5c	Medical, family, and psycho-social history including relevant genetic information
	5d	Relevant past interventions with outcomes
Clinical findings	6	Describe significant physical examination (PE) and important clinical findings
Timeline	7	Historical and current information from this episode of care organized as a timeline
Diagnostic assessment	8a	Diagnostic testing (such as PE, laboratory testing, imaging, surveys)
	8b	Diagnostic challenges (such as access to testing, financial, or cultural)
	8c	Diagnosis (including other diagnoses considered)
	8d	Prognosis (such as staging in oncology) where applicable
Therapeutic intervention	9a	Types of therapeutic intervention (such as pharmacologic, surgical, preventive, self-care)
	9b	Administration of therapeutic intervention (such as dosage, strength, duration)
	9c	Changes in therapeutic intervention (with rationale)
Follow-up and outcomes	10a	Clinical and patient-assessed outcomes (if available)
	10b	Important follow-up diagnostic and other test results
	10c	Intervention adherence and tolerability (how was this assessed?)
	10d	Adverse and unanticipated events
Discussion	11a	A scientific discussion of the strengths AND limitations associated with this case report
	11b	Discussion of the relevant medical literature with references
	11c	The scientific rationale for any conclusions (including assessment of possible causes)
	11d	The primary “takeaway” lessons of this case report (without references) in a one paragraph conclusion
Informed consent	12	Did the patient give informed consent? Please provide if requested. Yes/no

reports published in the JCVA during the past two years dealing with related subjects.

The discussion is the most important section and should compare and contrast your case with others previously reported in the literature. It is not meant to provide a comprehensive literature review and citation of all references. Emphasize the novel aspects or the special educational value of your case. The explanation or justification of an event, therapy, or intervention always should be provided with reference to supportive literature. A speculative explanation is unlikely to be acceptable unless it will generate a hypothesis leading to further research. A case report does not prove efficacy of a drug or a treatment for which clinical trials are required.

It also is worthwhile reiterating some of the general principles of writing a case report. The text should be checked and rechecked for mistakes in spelling, punctuation, and adherence to the Journal instructions. Authors from non-English-speaking countries should have the text read by someone who is fluent in English, preferably a native English-speaking editor. A manuscript that is difficult to comprehend is unlikely to be accepted. Importantly, when revising your paper, pay attention to the reviewer's comments and respond to all of them, and resubmit in the required format. It is very easy to reject a paper if the reviewer's advice has not been followed or the paper is resubmitted in the wrong format. Finally, if your report has an educational message, it is helpful to conclude with that message.

In conclusion, this editorial should serve as a guide for aspiring authors to develop basic skills needed in medical writing. I wish to end by highlighting some of the important "don'ts" when writing a case report. These are as follows: don't write without an initial comprehensive literature search; don't include everything, be choosy and include only relevant

findings and information; and don't summarize the case again in the discussion.

Best of luck.

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### Conflict of Interest

The author is the section editor of the *Journal of Cardiothoracic and Vascular Anesthesia*.

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