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# THE EDITOR'S CORNER

# The Value of Case Reports

This issue departs somewhat from our usual format in that it places a special emphasis on case reports. On numerous occasions at orthodontic meetings in the United States and Europe, and even at graduation ceremonies from orthodontic specialty programs, I have had relative strangers come up to inform me that "JCO is the journal that I actually read". These new-found friends often go on to say that they get practical and usable benefits from what they see in JCO, many noting that "I can put what I learn there to immediate use in my office". I regard such comments as the ultimate compliments. When I delve further, I find that case reports are among the features most often cited by these readers.

Not that the format is without its critics—primarily from within the academic community. Some believe that a small number of cases offer no grounds for establishing reliability or generality of findings, insisting that such reports are "unscientific". Others feel that the intense exposure of the authors to a particular case biases the findings. Yet researchers continue to use the case-report method with success in carefully planned and crafted studies of real-life situations, issues, and problems. There is a substantial body of literature that validates the case-study format, particularly in the fields of educational, behavioral, and life sciences.<sup>1-4</sup>

Although double-blind, randomized clinical trials are accepted as the gold standard for large-scale research in pharmaceutical and medical applications—such as the evaluation of a new vaccine or diet regimen—case reports are of particular value in situations where it is impossible to obtain a sample size of sufficient statistical power. I ran into this situation in researching the thesis for my orthodontic graduate degree. I was studying the cross-sectional area of maxillary tissue in various types of cleft palate, and I had access to the tomograms of all infants born with cleft palate who were seen at a Midwestern cleft center over a period of about 20 years. While there were several hundred records of all types of clefts, there were only three complete bilateral clefts, making any statistically

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based research within that group virtually meaningless.

Large-scale orthodontic trials are also restricted by the relative paucity of research funding for orthodontics. I heard this problem summarized at an orthodontic educators' conference a number of years ago, when a noted department chair said, "Who wants to give money for orthodontic research when there are babies with cancer?" If it weren't for the AAO Foundation, there would be next to nothing available for any type of orthodontic research. But even if we had unlimited funding, case reports would still be remarkably valuable in developing eventual randomized clinical trials. Case reports provide the intellectual seeds that grow into the scientific hypotheses for later statistical testing.

What's more, case reports provide detailed descriptions of unusual cases that can be of immediate benefit to clinicians facing similar situations. Even one well-treated case constitutes clinical evidence, to the extent that an approach worked or did not work. The task of our reviewers and editors is to ascertain that the records provided to illustrate a submitted case are adequate and properly taken, and that the patient was treated as well as possible under the circumstances.

Those criteria certainly apply to the current issue's reports, in which each patient presents a unique situation that challenged the authors to

devise an innovative solution. A fascinating presentation by Dr. Tamar Finkelstein and colleagues shows a conservative approach to treatment of an open-bite patient with amelogenesis imperfecta. Another case report, from Dr. Karen Fung and colleagues, illustrates an effective technique for treating a patient with infrabony defects. Miniscrews used in conjunction with the Herbst appliance, as in the case presented by Dr. Cesare Luzi and colleagues, will undoubtedly be a powerful addition to our clinical repertoire. A fourth case, from Dr. Janghoon Ahn and colleagues, documents the advantageous application of an old cephalometric standby in planning orthognathic surgery.

There will be plenty of raw material in this issue to provide multiple new hypotheses for further study—if the interest and funding exist. Meanwhile, I'm sure you will take a number of useful ideas from these case reports. RGK

# REFERENCES

- Soy, S.K.: The case study as a research method, University of Texas, 1997.
- Yin, R.K.: Case Study Research: Design and Methods, 4th ed., SAGE, Thousand Oaks, CA, 2009.
- Stake, R.E.: The Art of Case Study Research, SAGE, Thousand Oaks, CA, 1995.
- Gerring, J.: Case Study Research, Cambridge University Press, New York, 2005.

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