Rescuing Case Reports

Alexandre Rezende Vieira

Editor in Chief
Department of Oral Biology, University of Pittsburgh School of Dental Medicine, Pittsburgh PA, USA

This issue of Dentistry 3000 features a series of case reports that have particular emphasis on conditions that appear to be aggregating in families. The decision to emphasize case reports aims to address several areas of concern.

One of the consequences of the shift towards evidence-based practice is the assumption that case reports are very weak evidence in the hierarchy of research evidence, since they bring information that has not been rigorously tested. Conversely, this shift has created a high value for randomized clinical trials, for that very reason: the implementation of testing by rigorous scientific means. It is interesting to say the least to realize that increasingly, randomized clinical trials have become divorced from normal patient populations by their insistence on inclusion of patients defined by narrow criteria and absence of comorbidities. It is also interesting to realize that the original definition of evidence-based practice that included clinician experience and characteristics of individual patients as well as sound research evidence in the decision-making process has been hijacked [1] to the point that to be considered valid evidence, the evidence needs to be derived from research, eliminating the need to consider both the clinician experience or the patient characteristics.

This scenario has steadily declined opportunities for scholars to publish case reports. It was through short case reports that for the first time, trisomy of chromosome 21 was linked to Down syndrome [2], or that Down syndrome would associate with leukemia [3]. Almost simultaneous reports in Germany and Australia led to thalidomide to be identified as the cause of phocomelia in newborns [5]. Or a 1981 report of five cases that for the first time described a syndrome that was soon to be known as AIDS. The report concluded: "The above observations suggest the possibility of a cellular-immune dysfunction related to a common exposure that predisposes individuals to opportunistic infections." The bottom line is that case reports can provide insight to important problems that deserve further study.

Finally, writing case reports is a good exercise for young professionals in training and can serve as an important tool to teach a number of skills from appreciation and the ability to critically evaluate information to generate hypothesis driven questions that deserve further exploration. This issue brings a number of case reports authored by young professionals and emphasize the genetic etiology of oral, dental, and craniofacial conditions.

Dentistry 3000 will continue to publish original case reports and support the scholarly development of dental professionals both young and experienced.

References

1. Evidence-based case reports. Bolton J. J Can Chiropr Assoc v.58(1); 2014 Mar PMC3924510

2. [Chromosomic diagnosis of mongolism]. Lejeune J, Turpin R, Gautier M. Arch Fr Pediatr. 1959;16:962-3. French. PMID:14415503

3. Inheritance of an Abnormal Chromosome in Down's Syndrome (Mongolism) with Leukemia. German JL, Demayo AP, Bearn AG. Am J Hum Genet. 1962 Mar;14(1):31-43. PMID:17948467

4. Recognition of thalidomide defects. Smithells RW, Newman CG. J Med Genet. 1992 Oct;29(10):716-23. PMID:1433232

5. Pneumocystis pneumonia--Los Angeles. Centers for Disease Control (CDC). MMWR Morb Mortal Wkly Rep. 1981 Jun 5;30(21):250-2. PMID:6265753