

Editorial:

CASE REPORTS

José Ricardo Navarro-Vargas

Universidad Nacional de Colombia Bogotá Campus Faculty of Medicine Department of Surgery Bogotá, D.C. – Colombia

Corresponding author

José Ricardo Navarro-Vargas
Departamento de Cirugía
Facultad de Medicina
Universidad Nacional de Colombia
Bogotá. Colombia. Email: jrnavarrov@unal.edu.co

Observing and recording that which may be relevant and disseminating it through a concrete and well-written text are the teachings of Charles Darwin (1809-1882) and William Osler (1849-1919). Darwin published one of the greatest scientific books of all time, On the Origin of Species (1859), which was the result of multiple observations written down by the author on a daily basis. For his part, Osler was an outstanding doctor, a great semiologist, the father of modern medicine, and did not waste a moment to write down his scientific concerns and make them public.

Evidence-based medicine displaced case series and case reports in the medical literature. However, according to Vandenbroucke, "all kinds of research have a place in science, as well as their own space", in other words, they must be understood as complementary to medical research. Reporting particular or rare diseases is one of the objectives of case reports, but it is not the only one, since many of them have served as the basis for the development of major controlled clinical trials that have led to discover and describe new diseases, pharmacological side effects (beneficial or deleterious), the mechanisms of diseases, to provide education and promote medical audit, and to recognize rare manifestations of certain diseases.

Some researchers consider case reports as the first line of evidence-based medicine research. For example, finding a strange coagulation property in a person coming from a family that has had multiple venous thrombosis events led to discover activated protein C resistance, which is the most frequent cause of the congenital anomaly that leads to deep vein thrombosis: Factor V Leiden.

Case reports foster new ideas, new proposals and new theories; they allow to induce, infer, and even develop new projects from amazement, since a control group represents the expected course of the disease regarding the occurrence of a new phenomenon. All this makes it necessary to review the literature and make new associations, new interpretations, generate new knowledge.

For example, the case of Mary Mallon (better known as Typhoid Mary) was groundbreaking, since she was the first patient diagnosed as a healthy carrier of *Salmonella Typhi* in North America. However, thanks to the report of 53 infected patients and 3 deaths who had contact with her through her services as a cook, the necessary associations could be established from a public health perspective and she was left in quarantine (at that time, it was the best treatment to prevent the transmission of contagious diseases).

In order to prepare a good case report, it is necessary to ask the following questions: why exactly is this observation important? What teaching does it bring? Do you object to any previous evidence? Is it against some scientific concept or current evidence? Is there any unexpected association? Was it a provoked observation that led to study a mechanism? Can this mechanism be generalized? Is it a rare entity that, if reported, brings a great benefit to the scientific community and to patients? Once these questions have been answered, it is recommended to follow the IMRaD format (Introduction - Methods - Results -and - Discussion), although it is not always the most appropriate method to report a case or series of cases.

This issue presents case reports as broad as medicine itself: spontaneous pneumomediastinum, Ekbom's syndrome, appendiceal cystic dilation, pulmonary paracoccidioidomycosis and septic shock in an immunocompetent patient, congenital laryngeal saccular cyst, splenic rupture associated with thrombocytopenic purpura due to mononucleosis infection, dissection of ascending aorta in a patient with Marfan syndrome, and vesicular agenesis and choledocholithiasis. As you can see, case reports will continue to give us a lot to talk and teach about, I would say, forever, since they are the starting point for macro studies done with the best available clinical evidence.