

# Medicine, miracles and evidence

*“The ability to blunder slightly is the real marvel of DNA. Without this special attribute, we would still be anaerobic bacteria and there would be no music”.*

– LEWIS THOMAS

*“The controlled clinical trial means merely introducing the ordinary accepted criteria of a good scientific experiment”.*

– SIR GEORGE PICKERING

Several months ago, a daily newspaper devoted three pages to a long report about extraordinary, more or less miraculous cures, which are outside the scope of understanding of physicians and about which they do not like to give an opinion\*. And one of the “text boxes” of the article ended with this marvellous phrase: “A few cases are enough to demonstrate how medicine has not yet discovered everything”.

It is, without doubt, a curious text, from which a number of conclusions can be drawn. The first is: those who believe in extraordinary cures and miracles appear to accept that the doctor’s opinion is something unquestionable and infallible, and it does not enter their heads that seemingly supernatural cures may, in fact, be due to simple diagnostic errors. (This profession of faith in doctors and Medicine is, nevertheless, very encouraging for a profession that has been so mistreated in recent times).

The second conclusion is that those who speak in this way believe that biological phenomena follows a certain logic, and are therefore disciplined and predictable. They do not believe that, as a result of a “gaussian” distribution, some diseases can behave in atypical and unexpected ways, flaunting the rules considered biologically consensual.

Finally, the third and final conclusion: those who, like the author of that article, suddenly recognize that Medicine has still not discovered everything, probably because they thought it had nothing more to discover, which unfortunately for us all, is far from being true.

Having said that, I will not enter into the interes-



ting but risky discussion about what is Medicine. An art, a science, or according to Ortega y Gasset, merely a profession that looks to science for the results of research that proves to be effective. Perhaps we could compare the evolution of medical knowledge in recent centuries with the board game “Jogo da Glória”: sometimes you go forward several spaces, sometimes you stay on the same space without moving, sometimes you go backwards, and sometimes you go right back to the beginning.

The question we need to analyze here is: medical practice, or if you will, clinical practice, is a complex activity that is rooted in the basic sciences, personal experience, traditions, intuition, and empirical knowledge, and in which charm, sympathy and not infrequently, financial interests form part of a complex game and all contribute to the final result. All we physicians know this and we feel the need to base our practice, not only in this confusing constellation, but on scientifically confirmed data.

It was precisely this concern that led to the emergence, in the Anglo Saxon countries, of a methodology known as “Evidence-based Medicine”.

This is a different model for accessing medical information, or probably, a new paradigm whose objective is the systematic search for a rigorous clinical

practice based on scientific data. Because, contrary to the view expressed by the author of the article cited above, there is much that Medicine still does not know.

I will not dwell here on a critical analysis of this new methodology, which incidentally, I have had occasion to address in the past.\*\* But I just would like to say that it is a new perspective of Medicine that tends to devalue classical concepts, such as authority based on experience and reasoning based on physiology; it kicks up a lot of dust, feeds passions, and polemicizes opinion.

On one hand, there are those for whom “Evidence Based Medicine” is nothing more than a form of “fundamentalism”. And on the other, there are those who defend this new paradigm, faced with the great transformations seen in the last three decades, namely: the importance of the clinical trial (more than 500,000), the development of studies of clinical epidemiology, and a massive information overload (around two million articles per year in 20,000 medical journals).\*\*\*

It is for these reasons that the journal “Medicina Interna” is pleased to bring you two articles, one written by António Vaz Carneiro and another by Rui Moreno, which express the two different positions on this controversial subject. In this way, we hope to contribute to the debate on this recent topic, which we hope will be widened to other members of the medical profession. ■



Barros Veloso

\*THE CAPITAL, 19<sup>th</sup> January 1998.

\*\*Evidence-based Medicine: a arte e o ofício. Tempo Medicina, 2<sup>nd</sup> February 1998, page 24.

\*\*\*Jordi M. Gol Freixa. La medicina baseada em la evidencia. JAMA (Spanish edition), 1997: 5.