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EDITORIAL

Radiology, a problem of expression

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In 1895, when the interior of the human body was visualized for the first time without the need to cut the skin and dissect tissues, Roentgen took a big step towards the development of a new branch of science.

The physicist, through "a new kind of rays" (name of his work), managed to see for the first time the bones of his wife's left intact hand. At that time he must have been aware of the marvel of that discovery and conscious of part of the implications that such knowledge would have. Awareness of the new possibilities then open! However, he was certainly far from imagining everything that, after 125 years, we have been able to know about the inside of the human body through the then new species of rays among other things.

The technological evolution associated with X-radiation, but also with ultrasound, magnetic fields, contrasts, biomarkers, artificial intelligence makes it possible to see and foresee, discover and conclude countless interior mysteries without the need for a single scalpel!

Shortly after Roentgen's discovery, several scientists, doctors and physicists became interested in the knowledge of X-radiation and in the development of its applications. "**Roentgenology**" was created! However, this difficult-to-pronounce designation has not endured over time, having been adopted with clear diction advantages to "**Radiology**".

Physicians and physicists from the most diverse origins have contributed to the development of clinical applications of X-radiation. As an example, we have the remarkable work with the creation of the first mobile units of radiology equipment made during the first world war by Polish physicist, naturalized French, twice awarded the Nobel Prize, Marie Curie. Or, the recognized contribution of the Portuguese neurologist, Egas Moniz, Nobel Prize winner in Medicine in 1949, for his innovative work in 1927 when he performed the first cerebral angiographies.

The forerunner of our Radiology Society (SPRMN) was created in 1931. Designated at the time by the Portuguese Society of Medical Radiology, it aimed to encourage the study of Radiology (X-rays, Radio and related Radiations) both in its purely scientific aspects and in its practical applications to Medicine.

During the following decades, the clinical applications of Radiology were developed, some new emerged, some others persisted ... Several excessively invasive for clinical benefit, at a time when the knowledge of the biological effects of radiation was very limited.

The 70's are the "golden decade" of Radiology! The development and massive clinical application of techniques using X-radiation, such as computed tomography or mammography, but also of others that use physical means other than radiation, such as ultrasound or MRI, have created "**an expression problem**"!

Then, the doctors who were interested in seeing the interior of the human body, "the Radiologists" used only technology based on "X-radiation", so the term until then was in agreement with the doctor and the physical environment. But when there were several ways to obtain an image, many of them without using X-radiation, a "problem" was created between the doctor and the physical environment (I think the opposite does not apply)!

The term "**Radiologist**" to classify the specialist doctor in "viewing the inside of the body without a scalpel" was considered by many to be simplistic. The radiologist's activity was not limited to exams that used radiation as a means to obtain an image, as many also became "*ultrasoundists*", "*resonance-magnetists*".

Just like the Radiology clinics were not only Radiology clinics, since they had equipment other than the one producing X-radiation.

To avoid excluding a technique, broader terms such as **Imaging** or **Clinics of Imaging** were widely adopted although without complete success! In case of doubt at the address it is still in Radiology that we meet!

The Anglo-Saxons' exceptional ability to simplify, in particular Americans', is well known! To them, "**Radiology**" continued to be "Radiology but with broader horizons". In Medline Plus Medical Encyclopedia we find "Radiology is a branch of medicine that uses imaging technology to diagnose and treat disease. Doctors who specialize in radiology are called **radiologists**. "

On the other hand, we find with some frequency reports with the pleonasm "**radiologist doctor**" categorizing the individual who signs it.

Such redundancy is strange! We have greater difficulty in finding an endoscopy or a colonoscopy signed by the "gastroenterologist doctor". Usually there is no need for the p "prefix" given to his medical specialty!

As the song goes "the English language always sounds good and it never betrays anyone".

In the distinction between radiologist and radiology technician of diagnosis and therapy, the Anglo-Saxons also decided to simplify designations in an uncomplicated and figuratively happy way. The radiographer is easily identified and distinguished from the radiologist.

While no neologism or foreign term is incorporated in our language, and without minimizing any of the classes, the distinction should not be made by the introduction of any "prefix".

The title "**radiologist**" implies in addition to the 6 years required for the doctor's degree, 6 more years, 5 of which of specialized training and 2 national assessment exams (one to start and the other one at the end of the specialization).

Nowadays, the term **Radiology** has a broad enough meaning to be considered a branch of medicine that uses technology to diagnose and treat disease! And I might add, whatever the radiation or physical medium used in that technology that allows us to unveil the human interior without the need for a scalpel!

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