

The view of the radiologist: Doctor Philippe Bassnagel

The discovery of X-rays marks the onset of medical imaging. Röntgen's work immediately arouses enormous interest among physicians and the population. For the first time, it is possible to see within the body in vivo. Periodicals at the time popularized those images of bones, skull, backbone or limbs rapidly and throughout the following years. It was all the more easy as there was similarity with the image of our cultural representation of death.

Plain radiography has changed little in 100 years. Of course, there were many improvements (quality, speed to obtain a shot for interpretation by the radiologist, radiation dose needed), but even digital, it is always the same image.

Since then, other techniques have emerged, which used ultrasonic or magnetic fields, or combining X-rays with computers with a scanner. They have allowed physicians to access a more detailed anatomy, but for the patient, they have reinforced a feeling of the unknown.

Other feelings can also appear; in front of the incomprehensible nature of the medical image the non-specialist gives the radiologist an almost magical dimension. For him, seeing through the body, visualizing internal organs means seeing everything and therefore knowing everything, or else everything in the image.

The belief in the omnipotence of radiology is strong. The media regularly show what our machines can bring us. When we discover on the television the evolution of a foetus from the earliest weeks of its life until birth, as if we were actually in the womb, how indeed not to believe in this omnipotence?

This desire for knowledge explains that the discovery of the existence of limitations in the possibilities of diagnosis generates frustration; such frustration as sometimes motivates complaints that rarely end up with a court case.

Sometimes on the contrary, for example, radiographs are traumatising because of what they reveal, a cancer for example, because it calls into question the representation the patient has of his own body or because he experiences a feeling of "violation" of his privacy and his flesh. Radiographs can generate anguish. This is true, even outside the context of a disease, in the field of obstetric ultrasound, for example, where the patient is not the pregnant woman but the foetus she bears: fragmented, anatomical images in black and white, which bear no resemblance to a baby, far from the imagined child. For parents-to-be, 3D ultrasound may be able to delete those fears by reconstructing a face, a hand with a known shape, and even to create a real scopic drive, as exemplified when we read some forums.

As another element, the image comes between the radiologist and the patient. It is the object of the radiologist's interest at the expense of his patient who somehow disappears behind it. The latter often bears with difficulties that loss of human

contact, this imposed dissociation between the sick body and the objective body shown by the machines, at the origin of the concept of technical and dehumanized medicine. But conversely the patient would not understand if his general practitioner did not prescribe these additional tests which he expects will save him.

In fact, we ought to consider a triangular relationship in which the radiologist and his images would stand between the clinician and the patient. Clinicians were only providers of services for a long time. Things changed with the advent of ultrasound, scanner and MRI. The added value of the radiologist in taking care of the patient is now acknowledged, especially through multidisciplinary discussions and announced services in oncology and foetal medicine for the benefit of the patient.

This development must also include telemedicine, whose tele-imaging is an essential component, and which has developed in recent years in Western countries but to a limited extent in France so far. It gives access to the interpretation of patients' remote examination, but raises a number of ethical and economic issues. Starting with the medical confidentiality which must be shared with the remote practitioner. Thus, radiologist patient relationships are becoming distant and dehumanised even more.

Radiology has become a hyper-technical, exciting speciality. Our work is that of the researcher who must understand the cause of a disorder, a symptom or a pain. The radiologist strives to spot the clues of a lesion, of an often subtle anomaly causing pain, of a cough, of swollen joints... To do this he uses his eyes, trained as they are to spot any variation from the normal state, his knowledge of anatomy and of the respective contributions of each of the imaging techniques, his experience (his images mental library)... It is a difficult exercise because the patient wants to know why, expects a name, a disease. But, except in very special cases, radiology alone does not provide a diagnosis. It must indeed always be confronted with the patient's questioning and physical examination (inspection, palpation, auscultation). Medical imaging remains a complementary examination, along with biology, because we do not take care of images but of men, women, children to whom they belong.

Standard radiography, that of Röntgen, despite this extraordinary evolution, retains its place fully in the equipment of the radiologist and the exploration of the human body.

(translation Marie-Jeanne Da Col Richert)