

EDITORIAL

Radiology in the Emergency Department

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The difficulties of a minimally effective and dignifying response given by the Emergency Services at hospitals of the National Health System are recurrent.

The reasons have been exhaustively scrutinized and we all know that they are: - structural, due to the response that should be global to access, with easier assistance in Health Centers, with greater diffusion and dissemination of Basic Urgencies; - cyclical, according to the periods of the year when there is greater pressure caused by an increase in the incidence of seasonal diseases and due to the holiday seasons, when it is more difficult to maintain scales with the scarce human resources usually available.

These shortcomings are certainly transversal to the different specialties that respond urgently, some with greater impact on the media than others.

Recent and less recent examples of this are the closure of Emergency Units when the scale does not include an essential number of obstetricians or pediatricians.

Discontinuity in emergency care is expected due to insufficient number of internists or surgeons. Knowing the importance that “temporary physicians” currently have in the maintenance of Emergency Services, their absence, often related to the precarious employment relationship, also has a directly noticeable impact.

There are specialties like ours, Radiology, where minimum conditions for an adequate emergency response are not systematically met and nothing out of the ordinary seems to happen!

The Portuguese College of Doctors has recently published in *Diário da República* the Regulation for the Constitution of Medical Teams in the Emergency Department.

In this regulation, it was considered that the adequate response provided by Radiology:

- “- in a Medical-Surgical Emergency Service requires the availability of 1 specialist doctor, ideally in physical presence (possibly complemented by the standby regimen);
- in a Multipurpose Emergency Service, the response must be ensured by 1 specialist doctor who must be physically present;
- and that central hospitals with a Trauma Center need teams with a minimum of 2 general radiologists in physical presence and 1 interventional radiologist on standby.”

Non-compliance with this regulation has had less impact, without the need to close most of the Emergency Services, due to the support of teleradiology.

In the case of interventional radiology, transporting patients in unstable conditions over long distances or resorting to more drastic interventions on site have been alternatives to the expected attitude of being able to do very little!

I remember that when teleradiology first appeared it was argued that it would count for occasional responses to lack of the physical presence of a radiologist.

The Manual of Good Practices in Teleradiology of the Colleges of Radiology and Neuroradiology of the Portuguese College of Medicine, from 2014, states that “teleradiology presents important advantages, but also potential threats to the quality of care provided to patients and to the desirable interaction between radiologists /neuroradiologists responsible for the examination and the clinicians”, and, I add, with the patients who undergo the examination.

The aforementioned manual states that “carrying out the examination without the physical presence of a specialist, which requires correct guidance and adaptation of the protocol to the clinical situation, can harm the patient leading to: a) incorrect diagnoses; b) excessive use of defensive medicine, (e.g.) overvaluation of radiological findings; c) unjustified risks (e.g.) improper administration of intravenous contrast, excessive dose of ionizing radiation; d) unnecessarily time-consuming and costly examinations; e) repetition of exams, with the inherent costs.

“Point 1” of the General Principles of the referred document states that “the use of teleradiology must be confined to urgent examinations, in hospitals that do not have a specialist doctor on duty, in physical presence, at the time of their performance. Emergent exams can also be reported by teleradiology, although it should be noted that some emergent situations may be incompatible with the minimum teleradiology response time” and, I say, they are dependent on the interpretation capacity of the physician who is on site at the time of the request. viewing the images or, in the case of ultrasound, performing the technique.

This last resort solution has become the rule and has been exploited to the extreme, being the rule in most hospitals (where Coimbra’s still manages to be the exception only in the area of Radiology).

The remaining points, which indicated situations in which teleradiology should not be performed, are systematically forgotten and this has become the “crutch” of Radiology services in view of the shortage of human resources. It is the solution that allows to alleviate immediate costs and to easily overcome operational difficulties in order to meet immediate minimum requirements.

The rule shouldn't be just on paper, and the exception situation shouldn't become the rule.

Not long ago, regarding a report on the topic “Radiology response in the Emergency Department”, I was asked as Director of the Medical Imaging Department of the Centro Hospitalar e Universitário de Coimbra if “doctors specializing in radiology/imaging still carry out their function in person in the services themselves and in emergency departments or if they are in telemedicine, and from what time onwards?”

My reply which should be what is expected in a hospital of this size, and even to be in compliance with the recommendations

of the Portuguese College of Medicine, was the exception! The advantages of maintaining a scale in physical presence, such as being able to use ultrasound in emergent situations or circumstantiating the use of CT by adapting the exams to the clinical doubts to be clarified, were listed.

The difficulty in maintaining this scale and that this is one of the reasons for not retaining specialist doctors was also mentioned.

However, this is something that, as implied in the Portuguese College of Medicine's regulation for Emergency teams, we consider basic and essential in Emergency care at a Central Hospital.

I was amazed at the directness of the subsequent question: "whether it is to be expected that radiology/imaging will no longer exist in the units in the future and will only work in telemedicine?" The linear reasoning amazed me: if these specialist doctors are not needed to be physically present throughout the country for a significant number of hours, why are they needed to be present at the Radiology Services?

It is easy to say that Radiology is and will be what Radiologists want it to be, but for Radiology to survive and grow, basic rules must be followed.

If the future is an irreversible path towards the dismissal of the presence of the radiologist at the place where the exams are carried out, the specialty of Radiology itself is at stake. For there to be new radiologists, Training Services are needed with all the skills and competences for the transmission of knowledge.

Radiologists must emphasize their importance as fundamental physicians in the chain of diagnosis and

treatment of patients. In emergency departments, their presence at the place where the tests are carried out helps with clinical decisions, allowing the reduction of inappropriate tests and their correct adaptation to the respective clinical indications. The performance of urgent and emergent exams can and should be screened according to clinical indications and temporal rules previously discussed and approved.

Our absence in the emergency teams is quickly filled by other doctors who, surely, seek to carry out a quick training in Imaging, considering the multiple number of disposable courses available. Our specialty is losing ground.

The Portuguese College of Medicine will have made recommendations regarding the constitution of emergency teams and drafted standards of good practice in teleradiology with the aim of guiding the practice of Radiology not only with the objective of promoting our specialty, but primarily of better diagnosing and treating the patients. Recommendations that have certainly been thought through and deserve reflection from all of us, since they are different from the direction taken by the current practice of Radiology in Emergency Departments, particularly at night.

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<https://ordemosmedicos.pt/manual-de-boas-praticas-em-telerradiologia/>