

**THE MEDICAL RESPONSIBILITY OF THE CARDIOLOGIST IN MOROCCAN LAW
AND CORONARY HEART DISEASE**

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SUMMARY

Until now, dying of a myocardial infarction was a fatality for the general public. In the acute phase, the mortality of coronary patients has significantly decreased in Morocco as well as in the world. Stents have allowed a securing coronary angioplasty, solving the problem of coronary dissections which sometimes progressed to sudden occlusion or emergency bypass. Advances in the treatment of coronary heart disease may be accompanied by increasing judicial questioning of cardiologists. This responsibility will be studied in three stages of the life of the coronary patient: diagnostic errors, accidents in the exploration of the disease and therapeutic accidents.

1. INTRODUCTION

According to the literature, cases opened against cardiologists mainly follow: an infection associated with treatment, management of a stroke, a diagnostic error and, to a lesser extent: cases corresponding to lesions instrumental (essentially during transoesophageal ultrasounds), files related to iatrogenic medication (not concerning anticoagulants), involving pericardial effusion and prescription error files.

Patients or their dependents seek above all financial compensation in reparation for the harm or harm suffered which they consider to have a direct and certain causal link with the medical act.

In accordance with the trend found for many other medical or surgical specialties, the ordinal and penal responsibilities of cardiologists are only very little sought.

The objective of this work is studied, this responsibility in the three stages of the life of the coronary patient: The diagnostic errors, the accidents in the exploration of the disease and the therapeutic accidents.

2. Diagnostic errors

Cardiologists are regularly criticized for faults or diagnostic delays; for example: the delay in diagnosing a coronary pathology in a patient presenting signs predictive of an ischemic heart disease during an examination; or the delayed diagnosis of a heart attack in a patient admitted to the emergency department presenting initially intense chest pain, then decreasing and trinitrosensitive.

If the general public evokes in principle the incompetence of the doctors, the objective analysis of the complaints in certain countries shows in reality that it is rather the atypical clinical presentations or the communication problems, which cause the diagnostic process to fail.

Even if the signs are atypical, the diagnostic error risks being considered faulty when the doctor has not sought, by questioning, history and cardiovascular risk factors or, by clinical examination, for other atheromatous localizations.

Many physicians around the world are still condemned for ruling out coronary artery disease a normal interictal electrocardiogram or for others to have ruled out a heart attack on the pretext that trinitrine was ineffective on pain.^[1]

3. Incidents during diagnostic explorations**3.1. Programming period for explorations**

The occurrence of infarction or sudden death during the waiting period can be a source of frequent complaints, hence when coronary artery disease is suspected, treatment should be started while waiting for the exploration to be carried out.

The cardiologist must also explain to the patient what to do in the event of a reappearance of symptoms and it is ideally that the instructions are noted on a prescription.^[1]

3.2. Functional and coronarographic tests

Myocardial infarction or sudden death during the stress test are usually recorded as part of a no-fault hazard,

except in the event of non-compliance with the contraindications and the safety procedures of the examination.

The invasive risk of coronary angiography is also a source of complaint because its "non-invasive" nature is only relative and the venous injection of contrast medium exposes to a risk of extravasation, acute renal failure or anaphylactic shock.^[2-6]

4. Post-treatment incidents

4.1. Medical treatment

Verification of the absence of allergy is a prerequisite for any drug prescription. Criticisms of shortcomings in terms of screening for cardiovascular risk factors and prescriptions for lifestyle and dietary measures have also been increasingly a source of complaint.

In case of poor compliance, the cardiologist must imperatively report it in the patient's medical file.

Some accidents are caused by inaccurate prescription writing. In France A cardiologist was condemned following a fatal haemorrhage. Concerning a vitamin K antagonist, he had written "3/4- 3/4- 1/2", which was understood by the patient as a "morning, noon and evening" distribution; whereas it was a three-day alternating dose.

4.2. Coronary angioplasty

Angioplasty is a medical and surgical procedure generally performed under local anesthesia. It is prescribed in cases of coronary artery stenosis during coronary angiography.^[7]

In the majority of cases, the management of the complications of angioplasty is much more often the subject of criticism than the gesture itself. Accidents related to angioplasty equipment can also lead to legal complaints.

According to the literature, there were more coronary angiography accidents (66%) than angioplasty. The breakdown of accidents was as follows^[8]:

- * 36% of coronary dissections or occlusions (very marked regression since the advent of stents);
- * 26% strokes;
- * 20% of accidents related to the puncture point;
- * 13% others (pulmonary oedema, renal failure, arrhythmias).

These accidents resulted in death in 40% or serious disability in 46%.

5. Forensic perspective

5.1 Benefits/risks in interventional cardiology

Any medical act, whether care, treatment or examination, aims to bring one or more benefits to the patient. But this act can also involve more or less significant risks for the latter source of complaint, hence the role of the doctor in order to assess the benefit/risk balance. The 2015

recommendations of the European Society of Cardiology for coronary syndromes without ST elevation specify that an invasive strategy should be considered in the elderly, while taking into account the benefit/risk ratio.^[9]

5.2 Duty of information and informed consent

As with any medical act, it is imperative to obtain the informed consent of the patient before any act of care. The information is given to patients out of loyalty, so that they can make up their minds about a potentially risky act. It is not appropriate to disguise the risks to have the act accepted, nor to roll out a catalog without adjustments; but it is rather necessary to explain the risks of the act.

For the sake of traceability, do not hesitate to mention it in the file to materialize the clinical findings, prescriptions, advice but also the patient's refusals.^[9]

5.3 The medical responsibility of the cardiologist in Morocco

In Morocco, the law has not provided specific regulations for medical liability, which remains a case law instruction.

The involvement of the medical responsibility of the psychiatrist is envisaged on several levels^[10]:

- Civil liability where he is required to repair the damage he may have caused through his professional activity;
- Criminal liability aimed at sanctioning actions punishable by law with the aim of protecting society against practices disturbing its order;
- The ordinal responsibility where he answers for his faults before the disciplinary bodies of the College of Physicians;
- Administrative liability, for which the public hospital responds to faults committed by its agents or faults relating to its poor functioning.

5.4 Civil liability of the cardiologist

The doctor's obligations are generally qualified as obligations of means. Like any Moroccan doctor, the cardiologist is legally responsible for each professional act he performs, in case his act causes harm to his patient he is required to repair it financially: thus, it is his civil liability which is sought. This responsibility generally falls within the contractual domain according to the judgment of the Court of Appeal of Rabat of June 29, 1946, which affirms that "the relationship existing between doctor and his patient constitutes a contract entailing for the doctor an obligation comprising on his part the commitment to use care likely to achieve a certain result without guaranteeing a cure and to give the patient conscientious and attentive care in accordance with the acquired data of science".^[10]

The prescription in the absence of indication, the erroneous dosage, the duration of internment, the type of treatment inadequate and not in accordance with the acquired data of science, the fault of diagnosis or

monitoring, all fall within the framework of contractual fault supported by the cited article.^[10]

The questioning of civil liability requires the presence of three conditions: the fault, the damage and the causal link.^[10]

5.5 The penal responsibility of the cardiologist:

The penal responsibility of the cardiologist can also be called into question following an involuntary fact which causes harm to his patient following the exercise of the medical act. These are homicide and unintentional injuries.^[10]

Article 432 of the Penal Code provides: "Anyone who, through clumsiness, imprudence, inattention, negligence or non-observance of the regulations, involuntarily commits homicide or is involuntarily the cause is punished by imprisonment from three months to five years and a fine of 250 to 1000 DHs".

Article 433 of the Penal Code provides: "Anyone who, by clumsiness, imprudence, inattention, negligence or non-observance of the regulations, involuntarily causes injuries, blows or illnesses resulting in a personal incapacity for work of more than six days is punished by imprisonment from one month to two years and 'a fine of 120 to 500 DHs or one of these two penalties only'

5.6 Ordinal responsibility cardiologists

The National Order of Physicians is a professional, administrative and jurisdictional body for the defense and regulation of the medical profession. It is governed by Dahir no. 1-13-16 of March 13, 2013 promulgating law no. 08-12 relating to the National Order of Physicians. Any breach of the moral rules, whether described in the Code of Medical Ethics or not, may be punished by the disciplinary authorities of the Order, this in complete independence of the other means of incurring liability. The possible sanctions are: warning, reprimand, temporary or permanent ban on practicing medicine or removal from the register of the order.^[10]

6. CONCLUSION

To prevent a certain number of complaints in this direction, a major effort must be made in terms of informing patients, who want to be involved in the strategies concerning them and in order to have a solid defence, doctors must systematically take care to the traceability of all their actions and exchanges with their patients, but also to place the most undisciplined before their responsibilities, especially when they refuse care.

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