Sir,

In a recently published article, Klompt et al. stated that acute aortic dissection is not suspected in almost one-third of patients, and this is more likely in women, in the absence of back pain and in patients with extra-cardiac atherosclerosis. Moreover, we have read with interest two letters sent by Bossone and by Chen which focused on the clinical aspect of the aortic dissections [1-3].

We consider these articles very interesting, but we want to make a note about an aspect that they didn't consider: the forensic and legal implications.

From our experience in the Department of Forensic Medicine, in the University of Siena, Italy, it is well evident that in most cases the intervention of the medical examiner is required to ascertain the causes of sudden deaths in subjects deceased outside Hospitals. Classical sudden deaths, generally are attributable to heart diseases but in some cases they are due to rupture of aneurysms formed as a result of a dissection process. Forensic medicine is called, above all, in the assessment of those cases involving scenarios of professional responsibility. In most cases the dynamic seems to be always the same: the subject calls the doctor or enters the emergency room for chest or interscapular pain, not well defined. After routine investigations for the most common types of chest pain, namely cardiac, consisting of ECG and dosing of myocardial enzymes, the patient is discharged after a few hours of observation. In this period the pain can sometimes regress because of analgesics that have been administered in the meantime or for momentary stabilization of the disease. At this point, the patient often dies at home or comes back to the emergency room for the persistence or worsening of pain. Although further investigations are carried out as an echocardiogram or CT angiography (the gold standard for diagnosing this type of disease) the patient anyway dies during transportation to a hospital equipped with Cardiac Surgery, or died shortly after, considering the reduction in life expectancy for every hour that passes after symptom onset and surgery delicacy, burdened with significant mortality. While for true aneurysms, the onset generally consists in breaking of the aortic wall and in the patient’s death, for false aneurysms, or those formed in consequence of a dissection and the formation of a false lumen, there is a greater amount of time in which the doctor can and must intervene.

The onset of pain that brings the patient to the emergency room is often to report at the beginning of the dissection: in such a case, first-level tests as a echocardiogram would be useless in detecting this pathology: in fact, at the beginning of the dissection the cardiac silhouette may be intact due to minimal expansion of the wall. With each passing hour the column of blood between the two tunics dissociated increases and, with it, the expansion of the vessel and the wall tension: at this stage the disease is more easily diagnosed and the vessel also increase probability of breakage. When the latter occurs, death is sudden for blood spreading inside the pericardial cavity or, as it was observed, within the pleural cavity, with hemorrhagic shock and hemodynamic failure.

At this point the medical examiner is called to give a technical reasoned opinion on the matter, considering whether medical practices has been appropriate.

The analysis of our cases generally not assigned

Acute aortic dissections: The importance of a correct recognition

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responsibility to doctors who were cautious: the execution of all analysis in order to exclude heart disease, which is the most important cause of chest pain, is the first step of an appropriate diagnostic path. If, however, there is persistence of symptoms and negativity of testing, it is doctor duty to rule out other causes that may give such symptoms, especially aortic dissection, with attention in the identification of subjects at risk. Italian law supports and reinforces this inclination and protecting who relies on standardized directives and guidelines. However several judgments have shown that surgery for this condition is complex and the intra- or post-operative mortality is high, so the counter factual judgment is not respected.

Guidelines in fact prepare physicians to adopt an appropriate behaviour to the most typical case, remembering that doctors must know how to discern from them when the situation is not standardized, which means that an expert physician, but not diligent or prudent is similarly susceptible to condemnation, if his behaviour is negligent.

Thoracic aortic aneurysms constitute, therefore, an important example of the doctor’s vulnerability to diseases that are not readily recognizable and objectively in terms of approach, for which diagnosis guidelines seem to facilitate the guidance of the physician at least for “common” situations. Law still creates confusion, even with the efforts of the legislature to simplify and reduce the judicial harassment against the medical category: the hope is to achieve a better relationship between doctor and patient, remembering that the medical profession has many risks and doctor should have the possibility to make decision without fear of judgment in court, especially in cases in which diagnosis is very complex.

Conflict of interest. The authors declare that there is no conflict of interest arising out of this manuscript.

References