Takotsubo syndrome

Síndrome de Takotsubo

WHAT IS TAKOTSUBO SYNDROME?

Takotsubo syndrome or stress cardiomyopathy is an acute condition in which the heart muscle function is temporarily altered. After several days or weeks, it recovers or normalizes spontaneously. It is a relatively "new" syndrome, since the earliest descriptions date back to the 1990s in Japan. The name of Takotsubo is derived from Japanese due to the image obtained in the ventriculogram, which resembles an "octopus trapping pot" (Fig. 1)

WHAT CAUSES TAKOTSUBO SYNDROME?

At present the cause is unknown, but it can be triggered by situations of emotional stress (family or economic loss, catastrophe or violent situations). It can also occur in the context of acute diseases, as for example, after an asthma attack, serious infections or surgeries. Occasionally, no trigger is detected. It is more frequent in women, especially after menopause.

WHAT ARE THE SYMPTOMS?

It may present with chest pain (such as a myocardial infarction) or shortness of breath (such as heart failure). Rarely, it manifests with accelerated heartbeat or palpitations (such as arrhythmias) or neurological symptoms (such as stroke).

DIAGNOSIS

In general, it is diagnosed in patients who consult the emergency department or during hospitalization. The most important step according to symptoms and alterations in the electrocardiogram is to rule out acute myocardial infarction, which is a severe and acute form of coronary heart disease. Therefore, it is necessary to perform a coronary angiography, which is an invasive study, but very accurate to evaluate coronary obstructions. When observing that the arteries do not present lesions, there are elements that the treating physician analyzes which orient towards this syndrome (electrocardiogram, cardiac enzymes and echocardiogram). Finally, what ends up establishing the diagnosis is the recovery of cardiac function that, in general, is observed with the echocardiogram.

PROGNOSIS AND COMPLICATIONS

The most common complication is fluid retention (heart failure). Arrhythmias and embolism are more infrequent. Cardiac rupture is exceptional.

Compared with infarction, the evolution is more favorable. After a while, the same patient may have a second episode, but recovery is the rule.

TREATMENT

Given its reversible nature and spontaneous recovery, there is no specific treatment. It takes time for the muscle to "overcome the stress situation". In cases of heart failure it is necessary to use diuretics to "decongest" the lungs. Sometimes, muscle contraction deteriorates critically and the patient requires circulatory assistance for a few days. When associated arrhythmias occur, antiarrhythmic drugs are indicated, whereas when a stroke occurs or clots are formed within the cavities, anticoagulants are prescribed.



Fig. 1. Left ventriculogram (*) On the left, diastolic image (filling phase of the heart) and, on the right, systolic image (contraction phase of the heart).

(*) Left ventriculogram is the heart muscle evaluation through the injection of iodinated contrast. This study is performed in some patients after coronary angiography, which is the assessment of the coronary arteries.

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