

Ventricular tachycardia due to severe hyperkalemia in a patient with acute renal failure

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Introduction

Hyperkalemia is one of the most common emergency emergencies that can compromise the patient's life.

The urgency of the treatment of hyperkalaemia depends on the cause and the presence or absence of associated symptoms and signs. The most severe clinical manifestations of hyperkalemia include weakness to cardiac arrhythmias, including ventricular tachycardia. Among the possible causes of hyperkalemia is the decrease in glomerular filtration rate (GFR), renal failure (IR) only causes hyperkalemia when the GFR has fallen below 10-15

We present a case of hyperkalemia due to acute renal failure in which the patient presents with ventricular tachycardia.

Clinical Case

It is a 69-year-old patient, without drug allergies, lives alone, history of hypertension, diabetes, dyslipidemia, ischemic heart disease with anterior descending injury, circumflex, marginal obstust, right coronary with ventricular dysfunction, in catheterization performed three months ago where opted for surgical revascularization treatment with bad case warning for bad coronary vessels, performing a procedure, quadruple cardiac bypass aortocoronary two weeks before being treated in our service. At treatment atorvastatin 40 mg / 24 hours, losartan 50/24 hours, acetylsalicylic acid 100 mg / 24 hours, bisoprolol 2.5 / 24 hours, furosemide 40 mg / 24 hours, amiloride 5 mg / hydrochlorothiazide 50 mg / 24 hours. He went to the emergency room due to malaise, dyspnea and severe asthenia since he was discharged after coronary artery bypass surgery, with little food intake and decreased diuresis volume. It associated cough and yellowish mucus and in the last 24 hours he presents nausea and vomiting without oral tolerance to liquids. It does not refer to chest pain, alterations of the intestinal habit, abdominal pain or fever.

Upon arrival, he remained prone to hypotension, and afebrile, detecting severe acute renal failure with creatinine levels of 11 mg / dl, severe hyperkalemia of 8.67mEq / I and severe metabolic acidosis pH 7.04, bicarbonate 10.9, starting treatment for correction. of potassium and fluid therapy, being in the observation area suffers from a low level of consciousness, paleness, sweating evidenced in monitor ventricular tachycardia at 140-150 beats per minute with signs of hypoperfusion that required electrical cardioversion with three shocks recovering but with tracing of left bundle branch block, orotracheal intubation under sedoanalgesia and transferred to the intensive care unit (ICU). During his stay in the ICU he evolved favorably, requiring vasoactive drugs and venovenous hemodiafiltration for 48 hours, he recovered sinus rhythm, he was able to extubate early and began to increase the volume of diuresis. Later, he was admitted to the plant for follow-up and study of renal failure.

Conclusions

Hyperkalemia is a frequent pathology in an emergency and potentially fatal service. It can have clinical manifestations in its debut, be expressed by electrocardiographic alterations or be asymptomatic. It should be suspected and looked for in patients with a favorable clinical context. Early therapeutic measures should be established when there are clinical or electrocardiographic cardiovascular manifestations, or values above 6.5 mEq / L.

