Ultrasounds in the diagnose of shock in a 33-year-old woman suffering an abortion, is it volume the answer? A case report

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Background

The diagnose of shock may be difficult at the Emergency Department (ED) due to the needs of invasive technics; it may even slow down the initial resuscitation of the patient. Functional ultrasound (FU) has taken prominence in the last years as a non invasive tool to treat and monitor these patients once the information provided is integrated in a mind map.

Case report

We present a 33-year-old woman, pregnant of 15 weeks, who was admitted at the ED with hypotension and tachycardia after intense vaginal bleeding.

At first, we orientated the case as hypovolemic shock secondary to abortion, starting the initial resuscitation with intense fluidotherapy. No hemodynamic response was found, persisting hypotention and tachycardia, being norepinephrine started to maintain blood pressure.

The vaginal ultrasound showed embryonic remains that had to be removed at the operating room. After the intervention, she was admitted at the intensive care unit.

Once the FU was performed and we had integrated the information in our mind map we arrived at the conclusion that the patient had a **distributive shock** with a certain component of myocardial dysfunction, secondary to a septic abortion. Treatment was antibiotics, vasoactive drugs (norepinephrine and dobutamine) and volume restriction, being discharge from the ICU after 4 days.

Discussion

FU lets us classify the shock after analyzing the different variables of perfusion. It detects those relevant alterations in the shock and it guides us in the treatment once we have integrated the information in a mind map.

Lactate evolution (mg/dL)	DAY 1	DAY 2	DAY 3	DAY 4
	48	31	22	10

VTI 15.2 cm

E/A 1.56

Vena cava collapsability less than 20%

Learning points

In this case, we could have avoided the volume overload and a premature initiation of vasoactive drugs if we had had the ultrasound at the ED, optimizing the perfusion from the beginning and avoiding the overresuscitation syndrome.