USE OF ECOFAST IN OUT-OF-HOSPITAL EMERGENCY, EARLY DIAGNOSIS OF AORTIC DISSECTION

C.Del Hoyo Sánchez [1], F. Gil Almagro[2], F. Miguel Saldaña [1]
1 SAMUR – Protección Civil, Spain
2 UCC, Hospital Universitario Fundación Alcorcón, Spain

OBJECTIVE

The ECO-FAST technique ("The Focused Abdominal Sonography for Trauma Scan") objective is to immediately determine whether the shock is attributable to a hemoperitoneum, hemopericardium or hemopneumothorax. In addition to that, to being able to visualize visceral lesions such as the Aortic dissection, characterized by the creation of a false lumen in the middle layer of the aortic wall.

It is a life-threatening emergency with a high rate of morbidity and mortality. Its early diagnosis represents a clinical challenge.

METHODOLOGY

Review of SAMUR-Protección Civil assistance reports and patient follow-up.

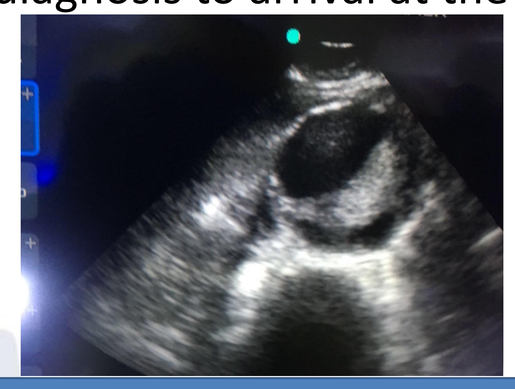
RESULTS

A 70-year-old man presented with pre-syncopal symptoms with abdominal pain and pain in the right iliac fossa, with strong vagal reaction. Upon arrival of the medical services, the patient is conscious with low tissue perfusion, bradycardia and hypotension. On abdominal examination, he presented palpable and throbbing mass in the left upper quadrant.

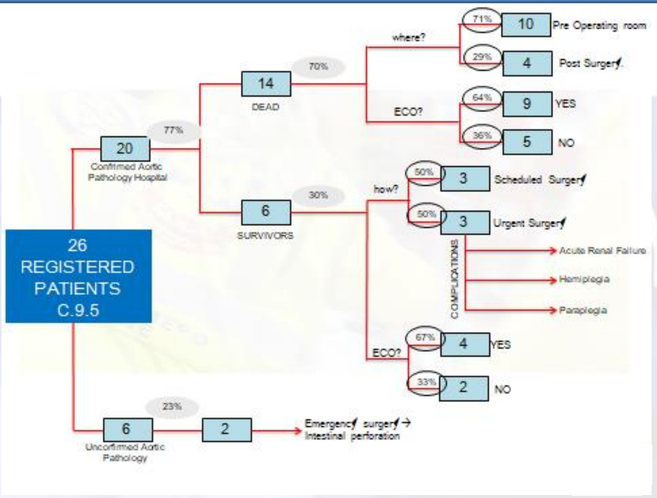
After stabilization and pain control we proceed to perform Ecofast, observing a double-lumen image in the Abdominal Aorta (> 6cm) compatible with Abdominal Aortic dissection image.

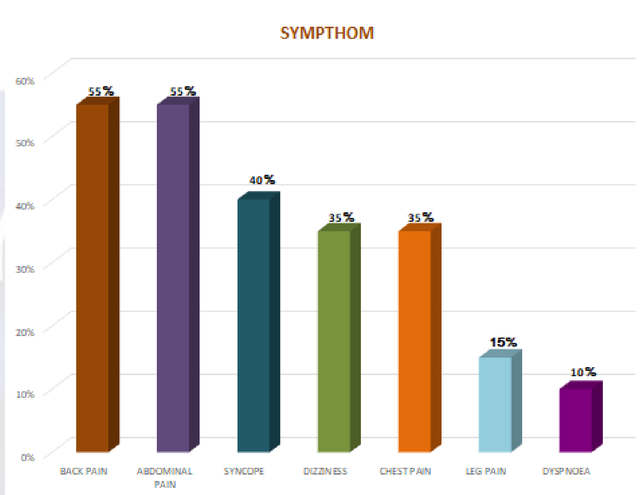
The patient is transferred to the hospital, after prehospital notification, being in the care of Vascular Surgery, in order to receive surgical treatment in the shortest possible time.

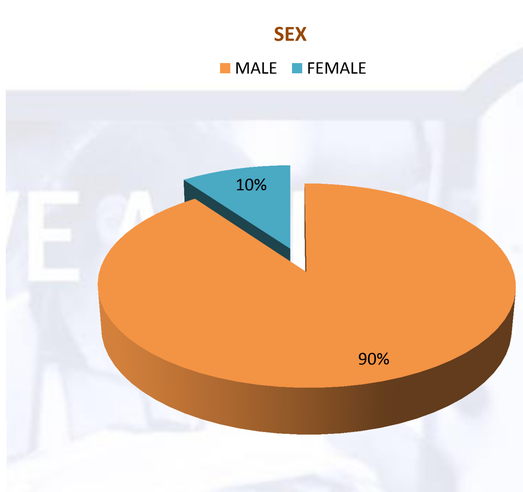
In our case, the time from diagnosis to arrival at the hospital was five minutes.

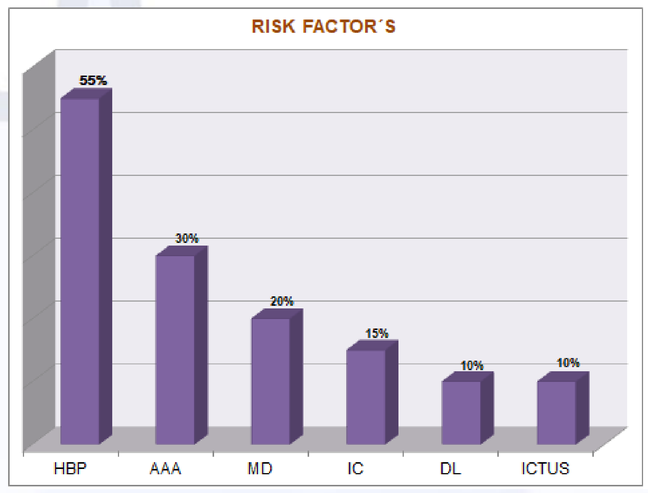


AORTIC PATHOLOGY REVIEW. SAMUR – PC (2010 – 2018)









CONCLUSIONS

Ultrasonography with fast technique is an extremely useful tool in the early diagnosis of acute aortic disease.
Thanks to this technique, we managed to minimize patient care times, prioritizing surgical treatment, the only possible option in this type of time-dependent pathology.