



## Medical device

### Medical device to guide the surgical cut of an aorta implant without suturing.

A researcher from the Andalusian Public Health System has developed a medical device to make an aorta implant easy.



## Description

Ageing population and technological development have led **aortic valve disease** to become **the most usual cardiac surgery** since a decade ago.

**Aorta implants without suturing** have been developed. These implants can be used in high risk patients with low morbidity.

However, it is **very important to choose the correct incision site** when not suturing implants are used.

Nowadays, there is not any device to measure distances correctly or establish references. A sterile paper ruler is the most common device used in aorta implant surgeries to decide the incision site. But, it is an inexact and uncomfortable method, and need three hands to be used.

On the other hand, **aorta diameter has a major impact on how successful surgery will be**. Aorta implant without suturing can only be implanted in a diameter range. The aorta diameter is inferred from echography, but it can be only confirmed after incision. If the diameter is not correct, an implant without suturing can not be used, and the incision will not be used for a conventional implant.

**To solve these problems**, a researcher from the Andalusian Public Health System has developed a medical device.

It is a **rigid device which can be used with a single hand**. The device shows **where and how to make the incision**. Moreover, the surgeon can **measure if the aorta diameter is correct** for the procedure.



## Advantages

- To measure aorta diameter before surgical incision.
- It makes easier to establish the incision site.
- To decrease the probability of incorrect incision.



## Intellectual Property

This technology is protected by national utility model application with possibility of international extension.



## Aims

The researcher is looking for partnership and/or license agreement.



## Classification

**Area:** Medical Device

**Pathology:** Cardiovascular surgery