An Important Role For Open Surgery Exists For AAA’s In 2015, And It Will In The Future

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There are not Conflicts of Interest regarding this presentation.

The Impact of Endovascular Procedures in Vascular Surgery

What was considered difficult anatomy, now can be easily managed

In most countries, including Brazil, the majority of abdominal aortic aneurysms (AAA) cases are currently treated by the endovascular method (EVAR). Since our first case performed in 1998, the percentage of AAA treated by EVAR progressed to over 90% in the last four years.

The increasing percentage of endovascular procedure in our experience – AAA from 1998 to 2015

What was considered impossible, now can be easily managed

The increasing percentage of endovascular procedure in our experience – AAA from 1998 to 2015

Long lasting results became the rule, even in hostile anatomy!

Treatment of Abdominal Aortic Aneurysms

CURRENT INDICATIONS OF OPEN SURGERY

Regarding all the advantages of EVAR, is there still place for a procedure that has:

- Longer hospital stay
- Longer intensive care stay
- Increased use of blood transfusion
- Higher morbidity
- Higher mortality
- Higher rate of discharge to nursing homes
- Delayed return to normal activities
**EVAR LIMITATIONS**
- Extremely hostile anatomy for EVAR
- Structural inadequacy to perform EVAR
- Lack of experienced professionals
- Cost

**EVAR CONTRAINDICATIONS**
- Acute AAA thrombosis
- Inadequate anatomy
- Renal blood supply variants
- Marfan's disease and
- Micotic aneurysms
- Prosthetic contamination
- Intestinal blood supply dependent on IMA
- Refusal to EVAR
- Inadequate hospital structure/ professionals
- Non adherence to the follow up protocol
CURRENT INDICATIONS OF OPEN SURGERY

EVAR CONTRAINDICATIONS

- Inadequate Anatomy
  - Critical neck
    - angled
    - dilated
    - conical
    - extensive juxtarenal thrombus

EVAR CONTRAINDICATIONS in 2015

- Critical neck
  - angled
  - dilated
  - conical
  - extensive juxtarenal thrombus

EVAR CONTRAINDICATIONS

- Inadequate Anatomy
  - Critical aortic neck
    - Extensive juxtarenal thrombus

EVAR CONTRAINDICATIONS in 2015

- Renal blood supply variants
  - Multiple renal arteries
  - horseshoe kidney
  - kidney ectopia
  - kidney transplant

EVAR CONTRAINDICATIONS

- Marfan’s disease and correlated disorders
- Intestinal blood supply dependent on IMA
- Mycotic aneurysms
- Prosthetic contamination
Complications of EVAR are usually treated by endovascular means, but some require a direct approach:

- The rare cases of immediate conversion
- Inadequate endograft implant
- Material fatigue
- Some endoleaks

In fact, what was considered impossible some time ago, now can be easily managed by EVT. Reintervention rate, which soared up to 21.6% between 1998-2002, went down to 3.8% in the last ten years.

Late Conversion

- Inadequate implantation
- Component fatigue
- Endoleaks and AAA ruptures not amenable to endovascular treatment

The increasing percentage of endovascular procedure in our experience – AAA from 1998 to 2015

But, some cases continue to be a challenge!

Ruptured AAA, with hemodynamic instability

Of the above-mentioned indications, many will never be manageable by EVAR. So, training and continuing performing of open AAA procedures should not be neglected.
EVAR is superior in short term.
With the majority of the endografts currently available, it is safe in long term too.
Open surgery should be reserved for specific situations and performed in centers with large case load.

Open surgery cannot be replaced in specific situations:
It’s applicability and versatility are unsurpassed!

Open AAA surgery and EVAR are the two faces of the same coin.
The vascular surgical team should be able to perform both techniques.