



ANEURYSM OF THE ABDOMINAL AORTA (AAA)

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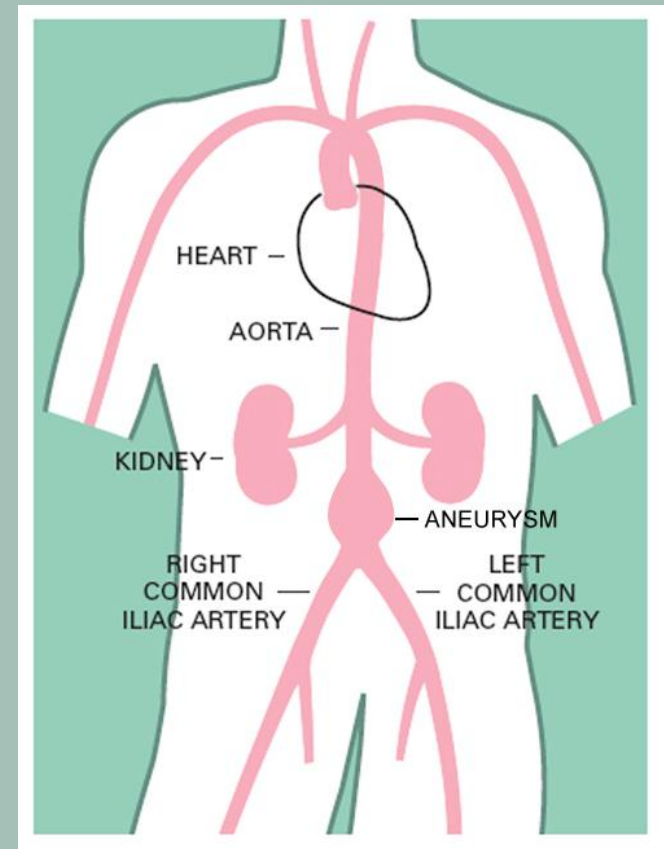
CURRENT SITUATION

- Over 16,000 people in the U.S. died last year from ruptured abdominal aortic aneurysms (AAA).
- AAAs are the tenth leading cause of death in men over 50.
- An estimated 1 million men and women worldwide are living with undiagnosed AAAs.

AAA ESSENTIALS

Definition

- Diameter of the aorta 1.5 times greater than normal.
- Most aortic aneurysms are fusiform means having a spindle-like shape that is wide in the middle and tapers at both ends.
- Most (about 90%) of abdominal aneurysms are located below the level of renal arteries but you can expect to see some extend down into one or both iliac arteries.



AAA ESSENTIALS

- Approximately 200,000 are diagnosed in the U.S. each year.
 - 16,000 Americans died of this condition in 2010.
 - 75% produce no symptoms.
 - 75% are detected incidentally – usually during imaging scans.
- Mortality rate: When AAAs rupture, only 18% of patients survive.

WHO IS MOST AT RISK?



Primary Risk Factors

- Men over 60
 - Men are four times more likely to develop AAAs, but 20% do occur in women.
- Smokers
 - Current smokers are seven times more likely to develop AAA than non-smokers.
 - Former smokers are three times more likely.
- Family History
 - 20% of AAA patients have a relative with the condition.

WHO IS MOST AT RISK?

Secondary risk factors:

- Obesity
- High blood pressure
- High cholesterol
- Atherosclerosis
- Cardiovascular disease
- Emphysema

SYMPTOMS

Although there are frequently no symptoms, AAA symptoms may include:

- Pain or tenderness in the lower back, abdomen or side
- Throbbing in the abdomen
- Indications of rupture may include:
 - Lightheadedness
 - Sweating
 - Clammy skin
 - Nausea

DIAGNOSIS



- Physical examination of abdomen
 - Abdominal tenderness may indicate an AAA
- Bruit (is the term for the unusual sound blood makes when it rushes past an obstruction) over the aorta
- Palpable mass
 - Not effective in obese patients and/or those with an AAA under 2 cm in diameter
- Usual: abdominal ultrasound >80% accurate
- As required: MRI, CT or other imaging systems
- Angiography rarely indicates

TREATMENT OPTIONS

- AAAs under 5 cm in diameter: usually monitored with serial ultrasound examinations
- AAAs 5 cm and larger: usually repaired with open surgery or endovascular repair

No proven lifestyle changes can decrease the size of AAAs.

REPAIR OPTIONS



- Both endovascular and open surgeries are used to repair AAAs.
- Approximately 40,000 repairs are performed each year in the U.S.

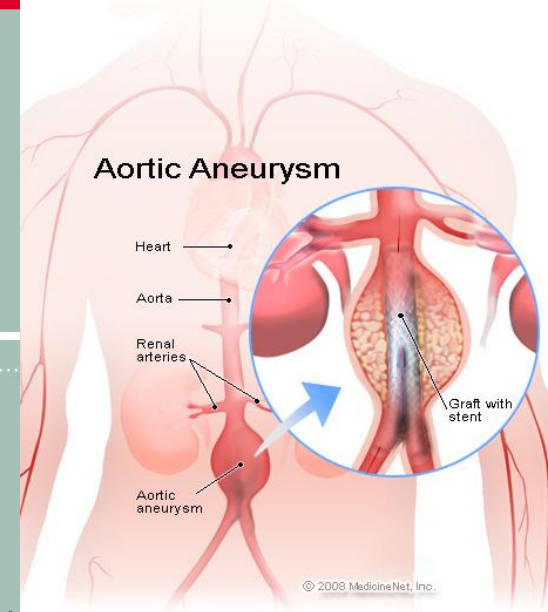
REPAIR OPTIONS

Endovascular Surgery

- Requires two small incisions in the groin area.
- An endovascular graft is inserted through the femoral artery via a catheter and deployed inside the lumen, relining the aorta.

Average hospital stay: 2-3 days

Average recovery time: 1-2 weeks



REPAIR OPTIONS



Open Surgery

- The goal of surgical treatment of abdominal aortic aneurysm is to prevent aneurysm rupture.
- Surgery requires large abdominal or flank incision
- Retroperitoneal dissection and exclusion of the aneurysm by clamping the aorta
- Removal of the affected aorta and replacement with surgical graft

Average hospital stay: 1 week

Average recovery time: 1-3 months

WHAT YOU CAN DO

Be aware AAAs are most often silent killers and are increasing in number.

- Remember those most at risk:
 - Men over 60
 - Smokers
 - Those with a family history of AAA