

## Abdominal Aortic Aneurysm (AAA) Fact Sheet

### Overview

An abdominal aortic aneurysm (AAA) is a blood-filled bulge or ballooning of the abdominal aorta, the artery that carries blood away from the heart to the lower part of the body. Over time, the vessel wall can lose its elasticity, and the force of normal blood pressure in the aneurysm can cause rupture. This can lead to severe pain, massive internal bleeding, or even sudden death.

### Prevalence

- AAA is the 3<sup>rd</sup> leading cause of sudden death in men over 60<sup>1</sup>
- More than one million people are living with an undiagnosed AAA<sup>2</sup>
- Only 10–25% of patients survive a ruptured AAA<sup>3-6</sup>

### Risk Factors

- Age – Individuals over the age of 60 are most likely to develop AAA
- Gender – AAAs are between five to ten times more common in men than in women<sup>7</sup>
- Family history – 15% of those with AAA have close relatives with the disease<sup>8</sup>
- History of smoking – users are 8 times more likely to be affected than non-users<sup>7</sup>
- Clogged arteries (atherosclerosis)
- High blood pressure (hypertension)
- High cholesterol (hypercholesteremia)

### Causes

The exact causes of AAA remain unknown. The aneurysm may be caused by a weakness in the wall of the aorta where it has become inflamed. Some experts believe that this inflammation may be due to clogged arteries, but it may also be related to heredity, injury or diseases.

### Symptoms

AAAs grow slowly and often go unnoticed, making it a “silent killer”. Most people will experience no signs or symptoms. Individuals who do experience symptoms may describe them as:

- A pulsing feeling in the abdomen
- Unexplained, severe pain in the lower back
- Tenderness in the chest

### Diagnosis

If detected early, AAAs can be successfully treated 95% of the time.<sup>2</sup> AAAs can be detected through a preventive screening test that involves an ultrasound exam of the abdomen. If an AAA is detected, the ultrasound measures the size of the aneurysm, which is a key step in identifying the best treatment option.

### Treatment Options

- **Watchful waiting** – If the aneurysm is small, patients are monitored every 6-12 months for changes in size. Lifestyle changes are often recommended
- **Open surgical repair** – A section of the aorta is replaced with a synthetic fabric tube (graft) through an abdominal incision. Performed under general anesthesia, the surgery takes 3-4 hours and may require a hospital stay of 7-10 days
- **Endovascular stent grafting** – A less-invasive alternative to surgical repair. A graft – supported by a metal scaffold (stent) – is placed inside the aneurysm without surgically opening the tissue in the diseased vessel. Hospital stays can be shorter – typically 2 to 4 days

As with any medical therapy, there are risks and benefits associated with both treatment options. Patients should talk with their doctor about which option is best for them.

For more information, visit [www.FindtheAAAAnswers.org](http://www.FindtheAAAAnswers.org).

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#### References:

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<sup>2</sup> Society for Vascular Surgery. Protect Yourself From An AAA Rupture. [http://www.vascularweb.org/patients/prevention/aaa\\_rupture.html](http://www.vascularweb.org/patients/prevention/aaa_rupture.html). Accessed August 3, 2009.

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<sup>3</sup> Mealy K, Salman A. The true incidence of ruptured abdominal aortic aneurysms. *Eur J Vasc Surg* 1988;2:405-8.

<sup>4</sup> Johansen K, Kohler TR, Nicholls SC, et al. Ruptured abdominal aortic aneurysm: the Harborview experience. *J Vasc Surg* 1991;13:240-5; discussion 245-7.

<sup>5</sup> Heikkinen M, Salenius J, Zeitlin R, et al. The fate of AAA patients referred electively to vascular surgical unit. *Scand J Surg* 2002;91:345-52.

<sup>6</sup> Brown PM, Pattenden R, Vernooy C, Zelt DT, Gutelius JR. Selective management of abdominal aortic aneurysms in a prospective measurement program. *J Vasc Surg*. 1996;23:213–220.

<sup>7</sup> Vascular Disease Foundation. AAA: Risk Factors. <http://www.vdf.org/diseaseinfo/aaa/riskfactors.php>. Accessed August 3, 2009.

<sup>8</sup> Darling RC III, Brewster DC, Darling RC, et al. Are familial abdominal aortic aneurysms different? *J Vasc Surg*. 1989;10 (1):39-43.

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