

## Case Study

### Aortic Aneurysm

T.A. is a 72-year-old retired schoolteacher who has had no back pain for several months has a long history of hypertension and had a myocardial infarction three years ago. Since that time, he has experienced symptoms of mild congestive heart failure with fatigue, dyspnea on exertion, and 1+ dependent edema. Lately he has noticed that his feet and toes have patchy areas of blueness, although he has no pain or numbness of the feet. During diagnostic testing for a cause of his low back pain, a 5.6 cm fusiform infrarenal abdominal aortic aneurysm was discovered. He is admitted to the hospital for evaluation and repair the aneurysm.

He has been married for 52 years and his wife is in good health; they have no children. He has a 50 pack /year history of smoking, but he quit when he had his MI several years ago. His current medications include furosemide enalapril, simvastatin, and 325 mg of aspirin daily.

In reviewing his health history, you identify three common risk factor for AAA. List the risk factors:

1. Atherosclerosis
2. Hypertension
3. Smoking

You explain that the blue areas of his feet and toes are cause by:

- a. Embolization from the aneurysm

The diagnostic test results you would expect to find that identify the size and location of the aneurysm are those of:

- a. A computed tomography scan

You expect that before scheduling his for surgery, further diagnostic testing that may be done includes:

- a. Coronary angiography

Your patient is naturally anxious as he waits for surgery and he tells you he feels as if there is a time bomb in his abdomen waiting to go off. You assure him that he is closely being observed and monitored and tell him to immediately report:

- a. Severe back pain

After surgery he is admitted to the ICU. He has an arterial line, a pulmonary artery catheter, a peripheral IV, a Foley catheter, an endotracheal tube, and a nasogastric tube to suction. He has continuous cardiac monitoring and is placed on a hyperthermia blanket. What is the primary purpose of the following devices used for your patient:

#	Device
1	Arterial line
2	Cardiac monitor
3	Foley catheter
4	Hypothermia blanket
5	Nasogastric tube
6	Peripheral IV line
7	Pulmonary artery catheter

Primary Purpose	Device #
Detect embolization to renal arteries	3
Prevent complications arising from swollen, bruised bowel	5
Detect effects of hypothermia	2
Detect alterations that could cause thrombosis or rupture of graft site	1
Provide access for fluid replacement	6
Evaluate hydration status	7
Prevent ventricular arrhythmias	4

During inpatient acute postoperative, you are most concerned by the finding of:

- a. a blood pressure of 166/90