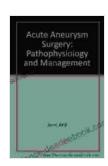
# **Acute Aneurysm Surgery: Pathophysiology** and Management

An aneurysm is a localized, abnormal enlargement of an artery. It can occur anywhere in the arterial system, but the most common sites are the aorta, the main artery that supplies blood to the body, and the cerebral arteries, which supply blood to the brain. Aneurysms can be either saccular (balloon-like) or fusiform (spindle-shaped).



# **Acute Aneurysm Surgery: Pathophysiology and**

Management by Keiji Sano

↑ ↑ ↑ ↑ 4.5 out of 5

Language : English

File size : 19815 KB

Text-to-Speech : Enabled

Enhanced typesetting: Enabled

Print length : 428 pages

Screen Reader : Supported



Acute aneurysms are those that rupture or leak blood. This is a medical emergency, as it can lead to severe bleeding and death. The symptoms of an acute aneurysm depend on its location. For example, a ruptured aortic aneurysm may cause sudden, severe pain in the abdomen or back, while a ruptured cerebral aneurysm may cause a sudden, severe headache.

The treatment for an acute aneurysm is surgery. The goal of surgery is to stop the bleeding and prevent further rupture. Surgery is typically performed open, meaning that the surgeon makes an incision in the artery

to repair or replace the aneurysm. In some cases, endovascular surgery may be used. This is a less invasive procedure in which the surgeon inserts a catheter into the artery and uses a stent to repair the aneurysm.

### **Pathophysiology**

Aneurysms are caused by a weakness in the arterial wall. This weakness can be caused by a number of factors, including:

- Atherosclerosis: This is a condition in which plaque builds up in the arteries. Plaque is made up of cholesterol, fat, calcium, and other substances. As plaque builds up, it can weaken the arterial wall and make it more likely to develop an aneurysm.
- Hypertension: This is a condition in which blood pressure is high. High blood pressure can put stress on the arterial wall and make it more likely to develop an aneurysm.
- Smoking: Smoking damages the arterial wall and makes it more likely to develop an aneurysm.
- Family history: People with a family history of aneurysms are more likely to develop them themselves.

### Management

The treatment for an acute aneurysm is surgery. The goal of surgery is to stop the bleeding and prevent further rupture. Surgery is typically performed open, meaning that the surgeon makes an incision in the artery to repair or replace the aneurysm. In some cases, endovascular surgery may be used. This is a less invasive procedure in which the

surgeon inserts a catheter into the artery and uses a stent to repair the aneurysm.

The type of surgery that is performed will depend on the size, location, and shape of the aneurysm. Open surgery is typically used for larger aneurysms or aneurysms that are located in difficult-to-reach areas. Endovascular surgery is typically used for smaller aneurysms or aneurysms that are located in more accessible areas.

The risks of surgery for an acute aneurysm include:

- Bleeding
- Infection
- Stroke
- Death

The prognosis for an acute aneurysm depends on the size, location, and shape of the aneurysm, as well as the patient's overall health. The mortality rate for ruptured aortic aneurysms is about 50%, while the mortality rate for ruptured cerebral aneurysms is about 30%.

Acute aneurysms are a serious medical emergency. The treatment for an acute aneurysm is surgery. The goal of surgery is to stop the bleeding and prevent further rupture. The type of surgery that is performed will depend on the size, location, and shape of the aneurysm. The risks of surgery include bleeding, infection, stroke, and death. The prognosis for an acute aneurysm depends on the

size, location, and shape of the aneurysm, as well as the patient's overall health.

#### **Related Resources**

- National Heart, Lung, and Blood Institute: Aneurysms
- Mayo Clinic: Aneurysms
- American Heart Association: Aneurysms

# **Image Credits**

- Figure 1: National Heart, Lung, and Blood Institute
- Figure 2: Mayo Clinic
- Figure 3: American Heart Association



# Acute Aneurysm Surgery: Pathophysiology and

Management by Keiji Sano

★★★★★ 4.5 out of 5
Language : English
File size : 19815 KB
Text-to-Speech : Enabled
Enhanced typesetting : Enabled
Print length : 428 pages

Screen Reader



: Supported



# Life of Napoleon Bonaparte, Volume II: His Rise to Power

\*\*\*\* Napoleon Bonaparte, one of the most influential and enigmatic figures in history, emerged from obscurity to become Emperor of the French and...



# **Lucy Sullivan Is Getting Married: A Tale of Love, Laughter, and Adventure**

Lucy Sullivan is a young woman who is about to get married. She is excited and nervous about the big day, but she is also confident that she is making...