

## Diagnosis and Treatment of Subaortic Membrane Papillary Fibroelastoma: A Rare Heart Condition

Haruka Takaoka<sup>\*</sup>

Department of Cardiovascular Medicine, Graduate School of Medicine, Chiba University, Chiba, Japan

## DESCRIPTION

Subaortic Membrane Papillary Fibroelastoma (SMPF) is a rare heart condition that affects both men and women of all ages. It is characterized by a small, fibrous growth of tissue on the inner wall of the aorta, the largest artery in the body. SMPF is typically benign, although it can be life-threatening if left untreated. In this guide, we will provide an overview of SMPF and its symptoms, diagnosis, and treatment.

Subaortic membrane papillary fibroelastoma is a rare, benign tumor that develops in one of the heart's valves. It is composed of connective tissue fibers, which are also known as elastic fibers. It is typically found in the aortic valve, but can also be found in the pulmonary valve, tricuspid valve, and mitral valve. SMPF can cause severe heart disease, but is treatable with early diagnosis and proper medical management. SMPF is usually found in adults, but it can also occur in children. It is a rare condition that affects both men and women of all ages. It is estimated that only 1 in 500,000 people are affected by SMPF.

Most people with SMPF do not experience any symptoms, as the tumor is usually small and asymptomatic. However, if the tumor grows, it can cause the following symptoms: Shortness of breath, fatigue, chest pain, palpitations, heart murmur, heart arrhythmia.

## Diagnosis and treatment

If a doctor suspects that a person may have SMPF, they will typically order tests to confirm the diagnosis. These tests may include: Echocardiogram, an ultrasound test that uses sound waves to create images of the heart and its valves. CT scan, that uses x-rays and a computer to create detailed images of the heart.

MRI, that uses magnets and radio waves to create detailed images of the heart. Angiogram, that uses a special dye and x-rays to create detailed images of the arteries. In some cases, a biopsy may be necessary to confirm a diagnosis of SMF. During a biopsy, a small sample of tissue is taken from the growth and examined under a microscope. Once a diagnosis of SMF is confirmed, a doctor will discuss the treatment options with the patient. In most cases, SMF does not require treatment and can be monitored with regular follow-up visits. However, if the growth is causing symptoms or is increasing in size, treatment may be necessary. Treatment options include open heart surgery, endovascular embolization, and medical therapy to manage symptoms.

**Open heart surgery:** Open heart surgery is the most common treatment for MPF. During the surgery, the surgeon will remove the tumor and replace the affected valve. This is a major surgery and can be associated with certain risks, such as infection, bleeding, or stroke.

**Endovascular embolization:** Endovascular embolization is a minimally invasive procedure used to treat MPF. During the procedure, the surgeon will use a catheter to inject a special dye into the tumor. The dye will block the blood flow to the tumor, causing it to shrink.

**Medical therapy:** Medical therapy is an option for those who cannot undergo surgery or embolization. Medications such as beta-blockers, ACE inhibitors, and diuretics can be used to reduce the symptoms of MPF and improve the patient's quality of life.

If left untreated, SMPF can cause serious complications, such as heart failure, stroke, and even death. It is important to seek medical attention as soon as possible if you are experiencing any symptoms of SMPF. Living with SMPF can be difficult, but it is possible with proper medical care and lifestyle changes. It is important to stay active and maintain a healthy diet, as this can help to keep the tumor from growing. It is also important to take any medications prescribed by your doctor and attend regular follow-up appointments.

## CONCLUSION

SMF is usually a benign condition and can often be successfully treated with surgery. In most cases, the outlook is good and the patient can return to their normal activities after recovery. However, if the growth is left untreated, it can cause serious complications. Early diagnosis and treatment can help reduce the risk of serious complications.

Correspondence to: Haruka Takaoka, Department of Cardiovascular Medicine, Graduate School of Medicine, Chiba University, Chiba, Japan, E-mail: harukatakaoka@gmail.com

Received: 17-Apr-2023, Manuscript No. JMST-23-21474; Editor assigned: 20-Apr-2023, Pre QC No. JMST-23-21474 (PQ); Reviewed: 04-May-2023, QC No. JMST-23-21474; Revised: 11-May-2023, Manuscript No. JMST-23-21474 (R); Published: 18-May-2023, DOI: 10.35248/2155-9589.23.13.340

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Citation: Takaoka H (2023) Diagnosis and Treatment of Subaortic Membrane Papillary Fibroelastoma: A Rare Heart Condition. J Membr Sci Technol. 13:340.