

Possible Mitral Valve Repair Risks Factors to Consider

Perioperative surgical complications

We understand how scary these risks factors sound. We encourage you to speak directly to the clinic performing your pet's surgery regarding these possibilities and voice your concerns before considering this surgery. When you arrive at each center the doctors will go over all the risk factors with you being sure you fully understand them before having you sign the form acknowledging them.

Patients with CHF associated with severe lung problems have a higher risk of mortality during surgery from surgical complications or anesthesia-related issues. Some patients may require prolonged respiratory support by mechanical ventilation.

Postoperative Congestive Heart Failure

The heart may lose contractility following open-heart surgery. This may occur from surgical manipulations including temporarily stopping the heart, incision and placing suture materials. Following the mitral valve repair surgery, tricuspid regurgitation may temporarily become prominent. The Tricuspid valve is located on the right side of the heart and severe tricuspid regurgitation may lead to retention of fluid in the abdomen.

Postoperative Pulmonary Dysfunction

Respiratory complications are caused from: hemorrhage in the chest pain, reduced contractility of the heart, reduced lung function (collapsed lung lobes, pulmonary embolism), diaphragmatic paralysis, and airway obstruction. Early detection of the problem is necessary for prompt treatment

Intracardiac Hematoma

Intracardiac hematoma may develop during or after the surgery. It may contribute to the mortality or it may reduce in size with or without surgical intervention to drain the hematoma. The cause of the hematoma is still unknown.

Hemorrhage

If anticoagulation effect is insufficient, postoperative prolonged hemorrhage from the surgical site may occur.

Anemia and Low Platelet Count

Mitral valve repair surgery is performed with cardiopulmonary bypass. Anemia is a common postoperative clinical finding from dilution effect of blood during the surgery. Low platelet count may also occur after the operation and its common symptoms include bruising of the skin.

Anemia and low platelet count usually improve few days after the surgery, but some patients may require blood transfusion.

Blood Transfusion Reaction

Blood typing and cross-matching are always performed prior to the operation, However, blood transfusion reaction can occur in some animals.

Thromboembolism

Postoperatively clots may form in the heart chambers or blood vessels and can lodge anywhere in the body. Symptoms of blood clots depend upon their location and size. Thromboembolism is a significant cause of morbidity and mortality.

▶ Neurological signs (coma, seizure, paralysis) ▶ Congestive heart failure from acute myocardial infarction ▶ Respiratory failure from pulmonary embolism ▶ Peripheral arterial embolism (motor dysfunction and necrosis) ▶ Pancreatitis (poor appetite, vomiting, diarrhea)

Possible Adverse Effects on Organ Function

The heart is temporarily stopped during the cardiopulmonary bypass, organs such as the liver, kidneys and pancreas may not receive adequate blood flow and may cause adverse effects on organ function postoperatively. Pancreatitis is one of the common complications from thrombosis or poor perfusion. Symptoms include poor appetite, vomiting or diarrhea and severe cases of pancreatitis can be fatal.

Arrhythmia

Arrhythmia (irregular heart beat) may occur during and after the surgery. Usually arrhythmia disappears after 1 to 2 days, however in rare cases the patient requires antiarrhythmic medications or pacemaker.

Diaphragmatic Paralysis

Paralysis of diaphragm occurs following incision into the left chest cavity. Rapid, shallow breathing, and shortness of breath can occur temporarily and spontaneous resolution is common.

Infection Postoperative infections may occur from a weakened immune system.