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Patterns of Oxygen Debt Repayment in Cardiogenic Shock Patients Receiving Extracorporeal Life Support

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INTRODUCTION

The goal of cardiogenic shock treatment is to restore blood pressure and heart function quickly. This often requires an immediate course of treatment in an ambulance or emergency room [1]. Other treatments include drugs, temporary aids to restore blood flow, and treatments to treat the underlying condition that is causing the heart to stop pumping enough blood. May include long-term therapy [2]. Once the cause of cardiogenic shock is identified, doctors treat the problem by doing one of the following: Bypass surgery is a common approach used by surgeons to create new pathways for blood to flow around blocked or narrowed arteries. These "bypasses" are created with healthy blood vessels in the chest (breast), arm (radius), or leg [3]. Balloon angioplasty is used to open blocked coronary arteries. In this minimally invasive procedure, a catheter (a thin, flexible tube) is inserted into the blocked artery and a small balloon is inflated to open the vessel and restore blood flow. Sometimes a stent (a small mesh tube) is used to keep the artery open [4]. You can restore a normal heart rhythm using any of the following procedures: Cardio version is like a quick "reset" of the heart and is very effective in returning the heart to its normal rhythm. Unfortunately, this does not rule out the possibility of future arrhythmias [5].

DESCRIPTION

This procedure uses two large adhesive pads placed on the chest and back to deliver rapid electrical shocks to the heart [4]. This is also done under anesthesia to avoid pain and discomfort as the impact causes the chest muscles to contract abruptly. A pacemaker is a small electrical device implanted under the skin, usually just below the collarbone in the chest, attached to one, two, or three small wires that are inserted into a vein and then into the heart. will be An electric pacemaker is usually used to treat an abnormally slow heartbeat that is causing symptoms (such as lightheadedness, fatigue, inability to move, shortness of breath, or fainting) or a potentially dangerous very slow heartbeat [2]. Special three-lead pacing systems are sometimes used to pace an uncoordinated beating heart. A new type of ultra-miniature pacemaker is being researched. This is a small metal capsule that has no wires and is embedded in the heart itself [5]. Catheter ablation is a minimally invasive procedure in which a few thin wires are inserted into a vein or artery in the groin and guided inside the heart to perform a very detailed electrical examination of the heart [3]. If an abnormal electrical spot or short circuit is identified, highly accurate heating or freezing techniques can be used to permanently eliminate the problem and treat or control rapid or irregular heartbeats.

CONCLUSION

Catheter ablation can be used to control symptoms, reduce the need for medications, and improve quality of life for a variety of electrical problems (arrhythmias). Ablation uses a variety of high-tech tools to provide doctors with highly detailed pictures and images to identify problems and guide the highly precise work going on inside the beating heart. In some cases, the underlying problem may be due to a heart defect or heart failure. In such cases, valve repair/replacement, mechanical circulatory support, or heart transplantation may be required. The key to a good outcome for patients with cardiogenic shock is systematic intervention with prompt diagnosis and prompt initiation of drug therapy to maintain blood pressure, cardiac output and respiratory support and to reverse the underlying cause.

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All patients should be admitted to the intensive care unit. This may include emergency transfer to a cardiac catheterization lab, intensive care transfer to a tertiary care center, or internal transfer to an Intensive Care Unit (ICU).

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CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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