

Overview on Pulmonary Atresia in Children along with its Preventive Measures

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DESCRIPTION

Pulmonary atresia is a congenital cardiac abnormality that is generally detected shortly after birth. The valve that allows blood to leave the heart and travel to the lungs (pulmonary valve) does not develop properly in pulmonary atresia. A solid sheet of tissue develops instead of opening and closing to allow blood to pass from the heart to the lungs. As a result, blood can't take the regular route to the lungs to pick up oxygen. Instead, some blood passes through other natural passageways within the heart and its arteries on its way to the lungs. When a newborn is developing in the womb, these channels are required, and they usually close soon after delivery. Because they aren't getting enough oxygen, children with pulmonary atresia generally have a blue hue to their skin. Pulmonary atresia is a potentially fatal condition. The first stages in treating pulmonary atresia include procedures to fix a children's heart problem and drugs to assist a baby's heart to perform more properly. Pulmonary atresia is a congenital cardiac abnormality in which the pulmonary valve does not develop normally or stays blocked after birth (the infant is born with it). ("Atresia" means "absence and "pulmonary" means "lungs.") Pulmonary atresia affects roughly one in every 10,000 live births.

Pulmonary atresia develops in the womb during the first eight weeks of pregnancy. The pulmonary valve does not develop properly in pulmonary atresia, which is a kind of heart disease. It is there from the moment of birth (congenital heart disease). The pulmonary valve is a right-sided heart valve that controls blood flow from the right ventricle (right-side pumping chamber) to the lungs. The valve leaflets are fused in pulmonary atresia. A solid sheet of tissue forms where the valve opening should be as a result of this. As a result, normal blood flow to the lungs is restricted. Blood from the right side of the heart is unable to reach the lungs to pick up oxygen because of this abnormality.

Symptoms

If a child has pulmonary atresia, symptoms will appear shortly after delivery. The following are possible signs and symptoms:

- Skin with a blue or grey tone (cyanosis)

- Shortness of breath or rapid breathing
- Being easily tired or exhausted
- Feeding issues

Risk factors

A congenital cardiac defect, such as pulmonary atresia, typically has no recognized etiology. Several factors, however, can raise a baby's chance of developing a congenital heart abnormality, including:

- Having a congenital heart defect as a parent
- Obesity in the mother before conception
- Smoking before or during pregnancy is harmful to a woman's health
- Adiabetic mother with uncontrolled diabetes

Prevention

It may not be able to avoid pulmonary atresia because the actual etiology is unclear. However, several things may be several things that may be done before or during pregnancy to help minimize the overall risk of congenital cardiac abnormalities in a newborn, such as:

Control chronic medical conditions: If people have diabetes, controlling low blood sugar can help them avoid cardiac problems. If anyone has other chronic problems that require medicine, such as high blood pressure or epilepsy, consult a doctor about the risks and benefits of these medications. During pregnancy, smoking cigarettes may raise the chance of a baby developing cardiac abnormalities.

German measles (rubella) vaccine: German measles can damage a baby's heart development if it is contracted during pregnancy. This danger is almost certainly eliminated if people are vaccinated before getting pregnant. Rubella, on the other hand, has not been linked to the development of pulmonary atresia.

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