





# Congenital heart defects: tetralogy of Fallot

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Congenital heart defects are among the most common congenital anomalies and involve structural defects in the heart and large blood vessels, as well as issues with the heart valves.<sup>1</sup> The exact causes of these defects are not fully understood, but they are associated with the use of certain medications during pregnancy, maternal health conditions, alcohol and drug use, physical trauma like exposure to radiation, and genetic abnormalities. According to the latest data from the Croatian Institute of Public Health, in 2023, out of 32,674 live births, 462 children were born with congenital heart defects, four of whom were diagnosed with Tetralogy of Fallot.

Tetralogy of Fallot (ToF) is the most common cyanotic congenital heart defect, involving a combination of several heart abnormalities such as pulmonary stenosis (PS), ventricular septal defect (VSD), an overriding aorta, and right ventricular hypertrophy. The symptoms include dizziness, chest pain, shortness of breath, frequent lung infections, slowed growth, cyanosis, and fatigue. This heart defect is linked to maternal phenylketonuria and is common in children with Down syndrome. Diagnosis is based on physical examination, echocardiography, and chest X-ray. Treatment typically involves early surgical intervention, along with medication. A potential complication includes arrhythmias, such as atrial or ventricular tachycardia, making regular check-ups crucial. The role of the nurse in caring for patients with congenital heart defects, including ToF, involves monitoring vital signs, educating patients on lifestyle, pregnancy, and motherhood, preventing infections, properly administering prescribed medications, assessing pain, and administering oxygen therapy, among other responsibilities. Since these patients often undergo multiple surgeries and frequent hospitalizations throughout their lives, psychological support is essential, and nurses play a key role in providing that support. Continuous education for nurses and medical staff can improve the quality of care, safety, and overall satisfaction of patients.

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## LITERATURE

1. Flocco SF, Habibi H, Dellafiore F, Sillman C. Guide for advanced nursing care of adults with congenital heart disease. New York: Springer; 2022. p. 19-21.