



UNDERSTANDING TETRALOGY OF FALLOT (TOF)



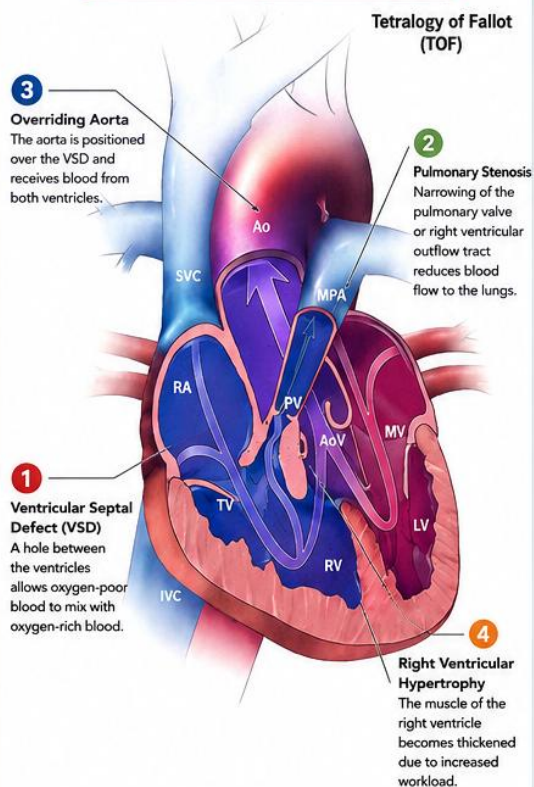
A LIFELONG JOURNEY FROM REPAIR TO HEALTHY ADULTHOOD

WHAT IS TOF?

Tetralogy of Fallot (TOF) is a congenital heart defect made up of four abnormalities that affect blood flow to the lungs and the body.

- 1 Ventricular Septal Defect (VSD)**
A hole between the ventricles.
- 2 Pulmonary Stenosis**
Narrowing of the pulmonary valve or outflow tract.
- 3 Overriding Aorta**
The aorta sits over the VSD and receives blood from both ventricles.
- 4 Right Ventricular Hypertrophy**
Thickening of the right ventricular muscle.

THE FOUR DEFECTS IN TOF



SURGICAL REPAIR

Most children undergo complete repair during infancy.

- ✓ Closure of the VSD
- ✓ Relief of pulmonary obstruction
- ✓ Improved blood flow to the lungs



EXCELLENT OUTCOMES

Most patients survive well into adulthood with a good quality of life.



COMMON SYMPTOMS BEFORE REPAIR

INFANTS

- Blue lips or skin (cyanosis)
- Difficulty feeding
- Poor growth
- Rapid breathing

CHILDREN

- Exercise intolerance
- Fatigue
- Squatting episodes
- Hypercyanotic ("Tet") spells



LONG-TERM COMPLICATIONS TO MONITOR

- Pulmonary Valve Regurgitation**
Most common long-term issue. Can cause right ventricular enlargement, arrhythmias, and reduced exercise tolerance.
- Residual Pulmonary Stenosis**
Persistent or recurrent narrowing.
- Arrhythmias**
Atrial flutter/fibrillation, ventricular tachycardia.
- Aortic Root Dilation**
Enlargement of the aorta requiring surveillance.
- Right Ventricular Dysfunction**
Can develop over many years and may lead to heart failure.

LIFELONG FOLLOW-UP IS ESSENTIAL

- Annual congenital cardiology visits
- Echocardiogram every 1-2 years
- Cardiac MRI every 2-5 years
- Exercise stress testing as recommended
- Holter / Event monitoring for palpitations or syncope

PULMONARY VALVE REPLACEMENT (PVR)

Many patients eventually require replacement of the pulmonary valve.

INDICATIONS MAY INCLUDE:

- ✓ Severe pulmonary regurgitation
- ✓ Enlarged right ventricle
- ✓ Reduced exercise capacity
- ✓ Arrhythmias
- ✓ Declining heart function

OPTIONS:

- ✓ Surgical Pulmonary Valve Replacement
- ✓ Transcatheter Pulmonary Valve Replacement

EXERCISE & SPORTS



Most repaired TOF patients can safely participate in physical activity.

Exercise recommendations should be individualized based on:

- ✓ Heart function
- ✓ Valve status
- ✓ Rhythm evaluation
- ✓ Exercise testing results

PREGNANCY



Most women with repaired TOF can have successful pregnancies.

Pre-pregnancy evaluation is recommended to assess:

- ✓ Heart function
- ✓ Pulmonary valve status
- ✓ Arrhythmia risk
- ✓ Aortic dimensions

SEEK MEDICAL ATTENTION IF YOU EXPERIENCE

- ⚠ Palpitations
- 💓 Fainting (Syncope)
- 💓 Chest Pain
- 🏃 New Exercise Intolerance
- 💓 Shortness of Breath
- 💓 Swelling of the Legs



KEY TAKE-HOME MESSAGE

Tetralogy of Fallot is a lifelong condition, even after successful repair.

Regular follow-up, advanced imaging, rhythm surveillance, and timely pulmonary valve replacement help patients maintain excellent long-term health and quality of life.



Lifelong
Care



Monitor
Valve & Heart
Function



Advanced
Imaging



Healthy Heart,
Brighter
Future



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