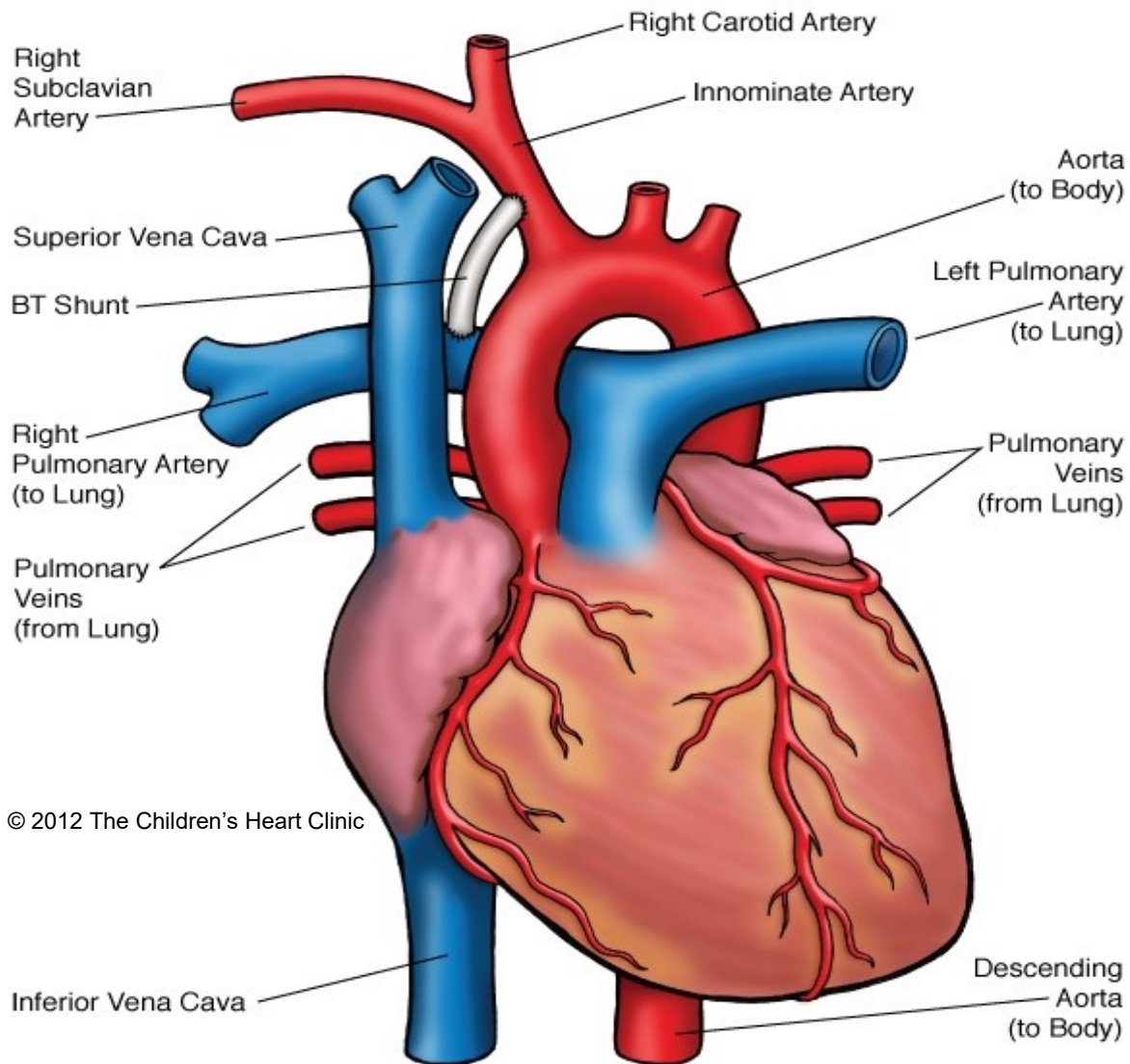


Modified Blalock-Taussig Shunt (MBTS)



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Notes:

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Modified Blalock-Taussig Shunt (MBTS)

Most often a modified Blalock-Taussig shunt (MBTS) is placed in the neonatal period to correct low oxygen saturation due to insufficient blood flow to the lungs, resulting from the newborn's particular form of congenital heart disease.

Either a median sternotomy (incision through the middle of the chest) or a lateral thoracotomy (incision through the side) is done. Cardiopulmonary bypass (heart-lung machine) may or may not be utilized, depending on the surgical plan. During surgery, a section of Gore-tex® tube graft (Gore) is cut to the appropriate length, an incision is made on the innominate artery, and the tube graft is sutured to the artery. Another incision is then made on the pulmonary artery and the other end of the Gore-tex® tube graft (Gore) is sutured to that incision. This creates a connection between the systemic arterial system and the pulmonary arterial system which serves to increase the amount of pulmonary (lung) blood flow, and thereby raise the oxygen saturations.

Typical Post-Operative Course:

- Surgery Length: 2-4 hours
- Typical Lines: Most children will return to the Cardiovascular Care Center after surgery with a breathing tube, an arterial line to monitor blood pressure, a central venous line (for giving IV medicines and drawing labs), a peripheral IV, chest tubes to drain fluid, a Foley catheter to drain urine, and occasionally, a temporary pacemaker wire.
- Typical Post-Operative Recovery: The breathing tube is usually removed within the first day following surgery. The central venous line is removed once most IV medicines are stopped and labs no longer need to be drawn. Chest tubes are usually removed the day after surgery, once the output of fluid is minimal. Shortly after surgery, the child is placed on heparin to prevent the shunt from clotting. Once the child is eating well, aspirin is started and the heparin is stopped. Aspirin is continued at home until the time of their next heart surgery.
- Typical Length of Stay: A child usually stays in the hospital for 7-10 days following placement of a MBTS.

Typical Home Medications: Children will require one or more medications at home following a MBTS such as:

- Diuretics (Lasix) to control fluid
- Anticoagulant (Aspirin, Lovenox) to prevent clotting
- Afterload reducing agent to lower blood pressure and decrease the work load of the heart (Enalapril, Captopril)
- Improving heart contractility/treatment of arrhythmia (Digoxin)