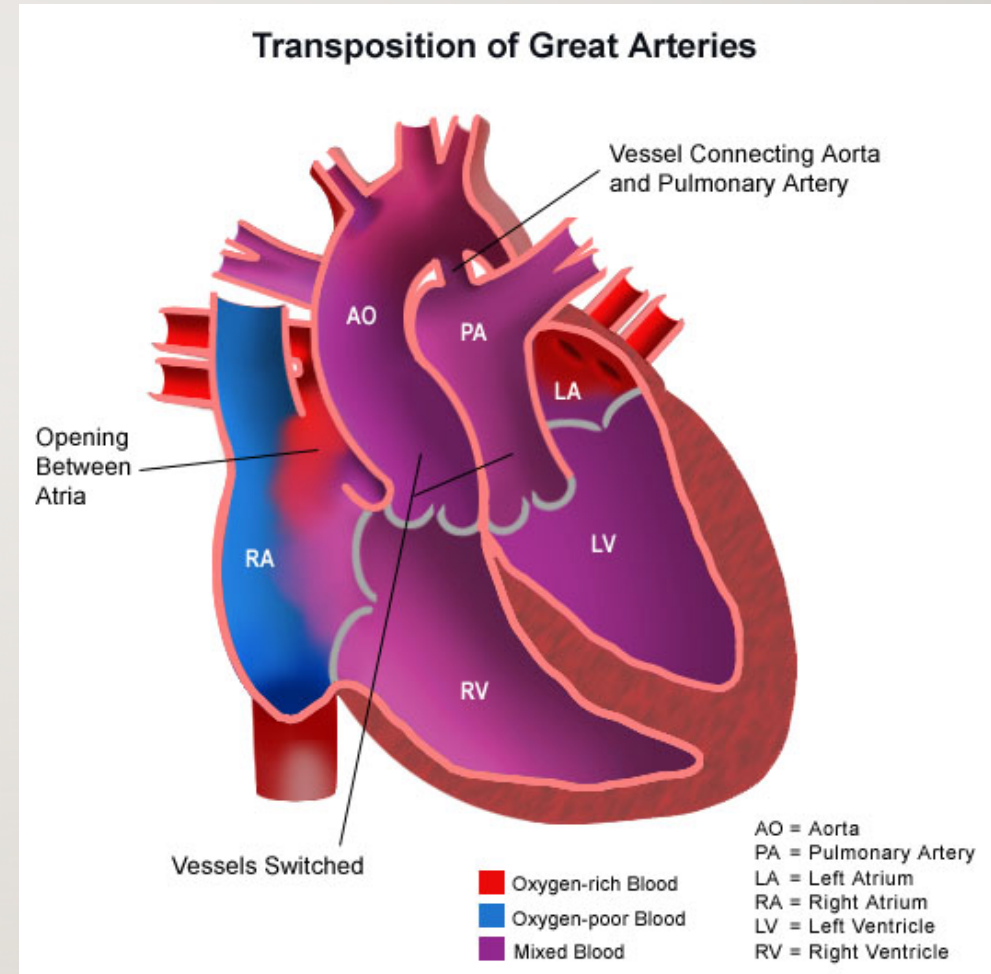


TRANSPOSITION OF THE GREAT VESSELS

GRACIE MUTH

WHAT IS TRANSPOSITION OF THE GREAT VESSELS?

- A heart defect that you get when you are born.
- The aorta and the pulmonary artery, which are the 2 major vessels that carry blood away from the heart, are switched.
- Another name is “Transposition of the Great Arteries” (TGA).

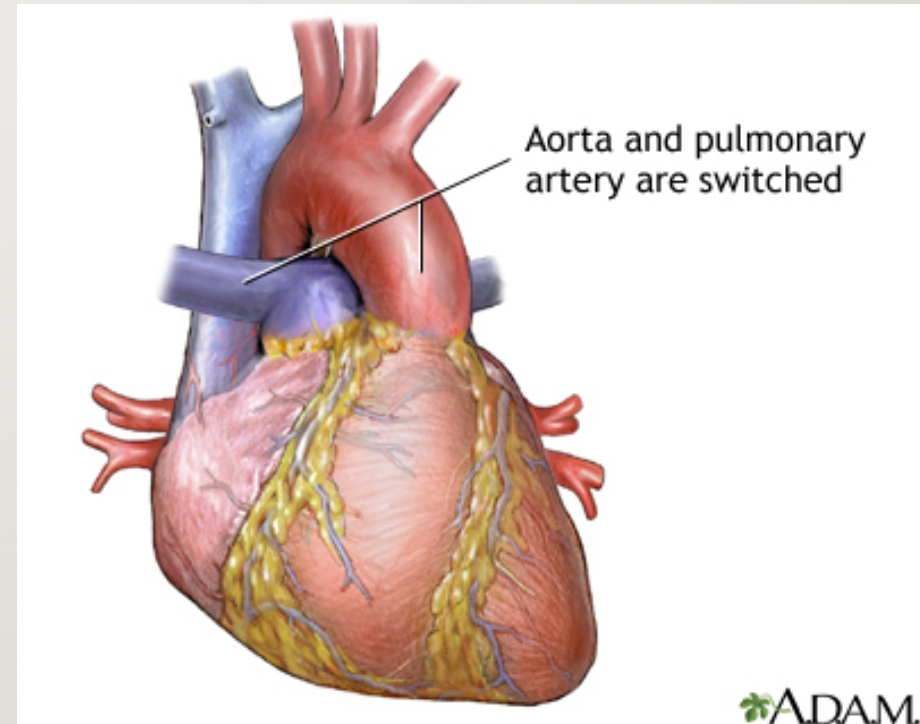


HOW IT EFFECTS THE HEART

- Red blood goes to the lungs and blue blood goes to the body.
- Red blood, which has the most oxygen goes to the wrong place.
- Lack of oxygen causes severe damage to the heart muscle in a short time.
- The result is death or a need for surgical intervention.

CAUSE OF TRANSPOSITION OF THE GREAT VESSELS

- Children are born with Transposition of the Great Vessels.
- TGA is a chromosomal birth defect.
- Symptoms include:
 - Blueness of the skin, poor feeding, shortness of breath, clubbing of the fingers or toes.
 - The baby's mouth and skin will be blue.



TREATMENT

- The baby will immediately need prostaglandin, a certain type of medicine, through an IV.
- This medicine helps to keep a blood vessel open allowing the 2 types of blood to circulate and mix.
- A procedure using a long tube may be needed to create a big hole in the atrial septum to allow the blood to mix.
- An arterial switch procedure is used to correct the problem within the baby's first week of life. The surgery switches the arteries to the right places and keeps coronary arteries attached to the aorta.

EFFECTS OF SURGERY

- If the right surgery is not done correctly the life expectancy is only a few months.
- It is very possible for the child to die if they wait too long before having open heart surgery.
- Bacterial infection could be problematic.

PREVENTION/RISK FACTORS

- The cause of TGA is unknown but there are factors that can increase the risk of getting the condition.
- Mother could have: Age over 40, alcohol problems, diabetes, poor nutrition, or rubella.
- Women who are pregnant should be immunized against rubella if they are not already immune.
- It is a chromosomal disorder.

FIVE FACTS

- 60-70% of infants with TGA are boys.
- It occurs in only 5-7% of all congenital heart defects.
- 2nd most common heart defect that causes problems in early infancy.
- The cause of TGA is unknown.
- My family has a lot of knowledge about TGA.



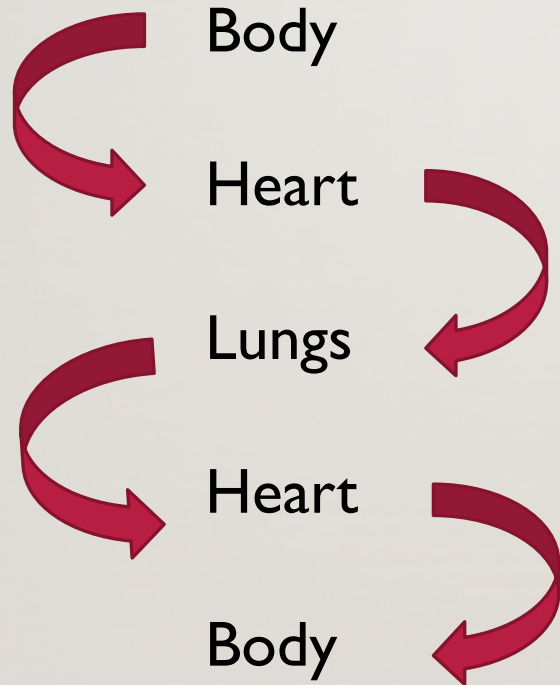
PEOPLE LIVING WITH TRANSPOSITION OF THE GREAT VESSELS



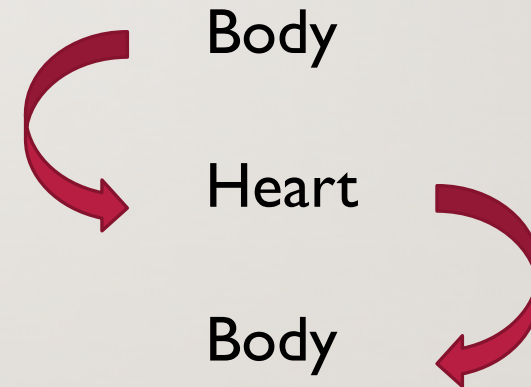
TREVOR MUTH

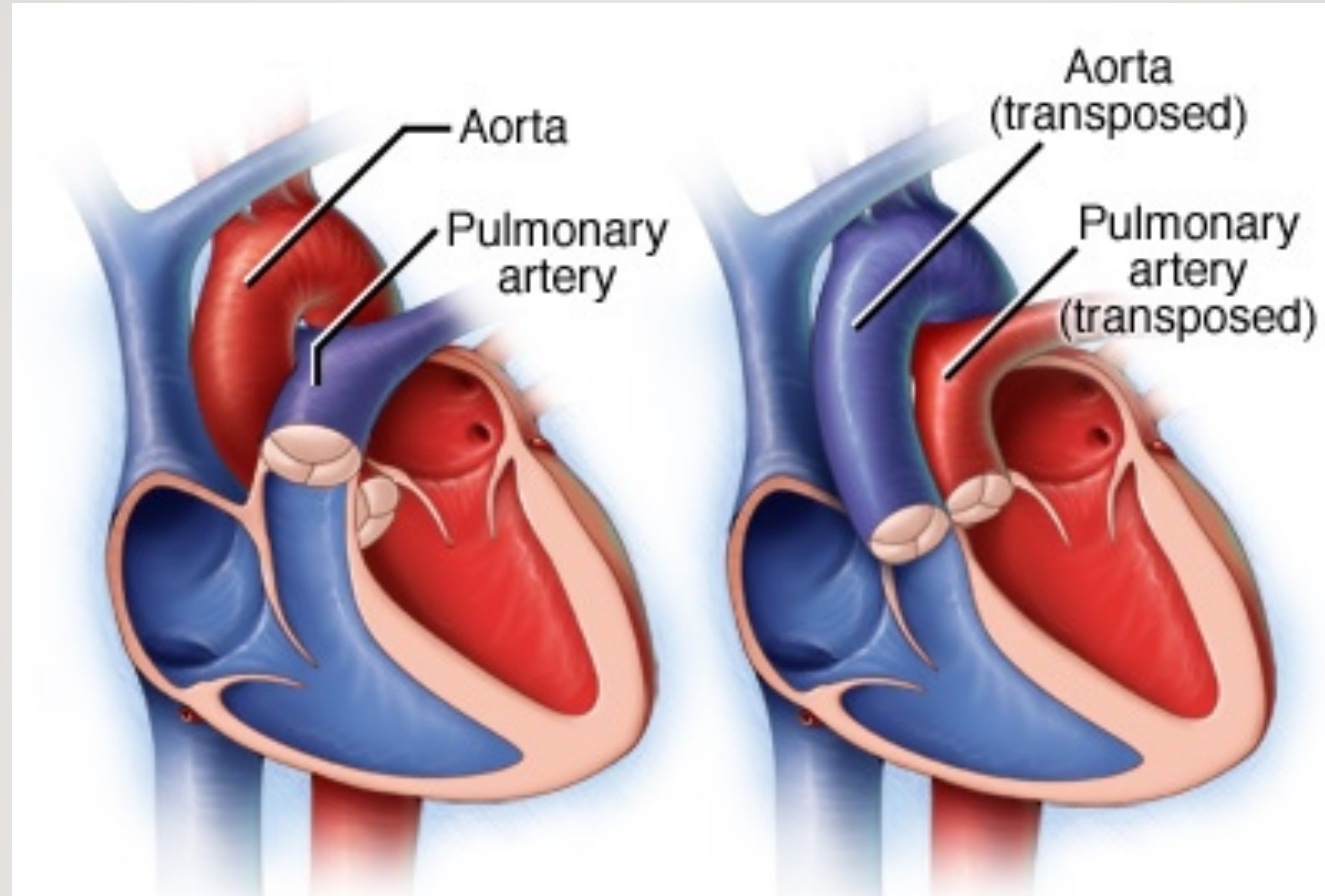
TREVOR'S HEART PATTERN VS A NORMAL HEART

Normal Blood Pattern:



Trevor's Blood Pattern:



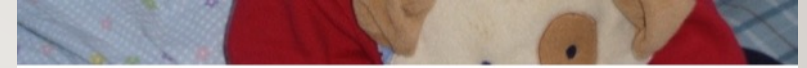


Normal Heart

Trevor's TGA Heart

TREVOR'S HEART

- Trevor had a significant hole in his heart when he was born, he also had pulmonary valve stenosis (a valve that didn't work properly), and TGA.
- He was in surgery 12 hours after being born. The doctors were able to provide prostaglandin and insert a balloon which created a hole in his atrial septum to allow the blue and red blood to mix.
- While having a hole is bad, it actually helped Trevor until the doctors fixed him in open heart surgery at 6 months old.



TREVOR'S SURGERY

- The period between when Trevor was born and when he was getting the open heart surgery, Trevor went into cardiac arrest.
- The family doctor and the cardiologist worked together to give Trevor the right medication. He eventually made a tremendous comeback.
- During Trevor's open heart surgery, they switched the arteries so they were in the correct spots. They sewed up the hole in his heart and took out the pulmonary valve. They sewed the artery back onto the heart without a valve.
- As a result of this, he will need surgery around the age of 20, when he is done growing to restore/fix the valve.

Revolution

ATTENTION ALL GUESTS
READ IMPORTANT SAFETY INFORMATION
AND FOLLOW INSTRUCTIONS OF ATTENDANTS



RIDE DESCRIPTION: HIGH THRILL

Revolution is an exciting roller coaster with high speeds, steep drops, fast turns, inverted loops and sudden stops.

Revolution

Do not ride if you have any of the following conditions:



At your option, you should be trained and able to ride. This roller coaster is not recommended for children. If you suffer any health condition or are pregnant, do not ride. Age limit is 14 years old or older. All seats must be occupied.

RIDE RULES

- All passenger restraints including lap bars, shoulder harnesses and seatbelts must be positioned and fastened properly to allow guest to ride. Do not ride if you are unable to do so.
- Secure all loose articles, glasses, cameras, cell phones, hats, wigs, or items that will fall while riding.
- Cameras and video equipment are not permitted on the ride.
- Smoking is not permitted in the queue line or on the ride.
- Chewing gum, candy, food and drinks are prohibited in the queue line and not permitted on the ride.
- Line jumping for any reason is cause for ejection from the park.
- The park is not responsible for any personal items that are lost, damaged or stolen.
- If you are hearing impaired, ask the ride attendant for written ride instructions before boarding the ride.
- Stay seated, face forward, hold feet, arms and legs while riding at all times.
- Hold on to grab bar at all times.
- Remove hearing aids and jewelry including earrings prior to riding.



Contact the Operator for assistance.
Refer to ADA Guide for details.

With Assistance
Some individuals may be able to ride with assistance. If you are unable to ride on your own, please contact the ride attendant for assistance. Assistance is provided on a case-by-case basis. Some restrictions may apply. All guests must be at least 14 years old. All seats must be occupied. ©2013 Cedar Fair Entertainment Company

EFFECTS

- TGA caused Trevor to be born blue.
- He is not allowed in hot tubs or in hot showers, because his heart beat starts going way too fast.
- He cannot ride rollercoasters that advise kids with heart problems not to ride.
- Trevor also doesn't get as much oxygen in his blood as normal kids so he tires out a lot faster, resulting in him not being able to do certain sports.
- When he gets to high school he will eventually have to quit playing basketball, because he runs out of oxygen too quickly to keep up.





EFFECTS

- Every year Trevor goes to Children's Hospital for a yearly check up to make sure everything is running properly.
- In the tests they do during these checkups, they watch to see how much blood flows back into the heart (since there is no pulmonary valve).
- Someday it will be too much to handle, and Trevor will be headed to the hospital.
- Trevor also has a condition that could cause him to easily collapse. This condition is called Wolf Parkinson's.



EFFECTS

- Trevor has a big scar running down his chest where he was cut open, and a small horizontal line under it where a tube was placed to get all of the fluids sucked out of his little body.
- The scars are both still very visible.
- Trevor needs another open heart surgery when he is done growing around age 20.

CONCLUSION

- Trevor's heart surgery was a big success. Everyone in our family, and all of our friends call him "Miracle Boy" because in the six months between his birth and surgery Trevor was very close to dying. He was having a tough time breathing and he was losing a lot of weight which was really bad for a person so young.
- Now, Trevor is healthy as can be. He may not be able to do certain things normal people can do, but that does not stop him from giving up and being happy.

Trevor's First Basket



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