

Heartio Therapeutics Presents...

HeartioFlow

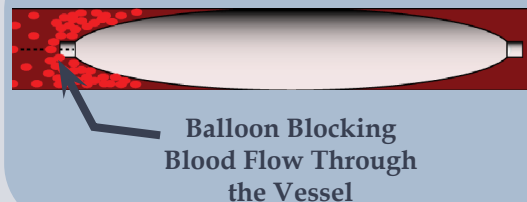
a novel balloon catheter design that allows perfusion of blood flow during pediatric angioplasty procedures, reducing the risk of complications due to occlusion.

THE PROBLEM

CLINICAL NEED

1 in every 1000 babies are born with defects resulting in significantly narrowed arteries

CURRENT BALLOONS CAUSE OCCLUSION



PROBLEMS WITH OCCLUSION

The patient may experience:

- Hypoxia
- Brain Damage
- Imbalanced Hemodynamics

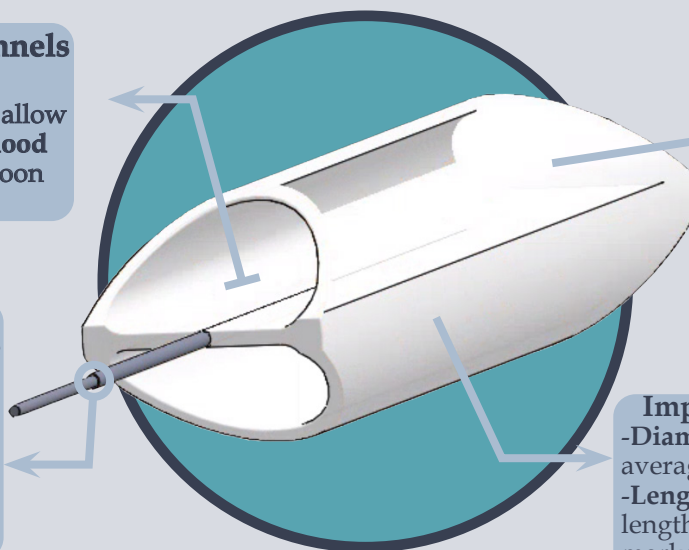
OUR SOLUTION

Dual Semi-Circle Channels

-Two semi-circular hollow channels with radii 4.17mm, allow for **at least 50% of normal blood flow** to pass through the balloon while fully inflated.

Over-the-Wire System

- Current inflation technique
- Guidewire lumen
- Inflation/deflation lumen
- Saline diffuses through the center of the balloon for uniform inflation.



allows for
50%
normal
blood flow
during
inflation

Polyethylene

- Biocompatible
- Anticoagulant properties
- Durable
- Semi-compliant

Important Dimensions

- Diameter of Balloon: 10mm (the average size of pediatric aorta)
- Length of Balloon: 30mm (the length of current balloons on the market)

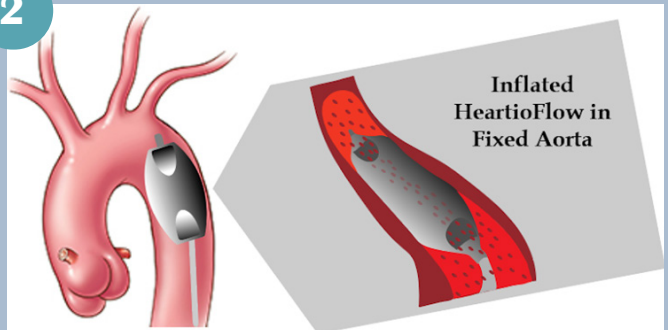
THE PROCEDURE

1



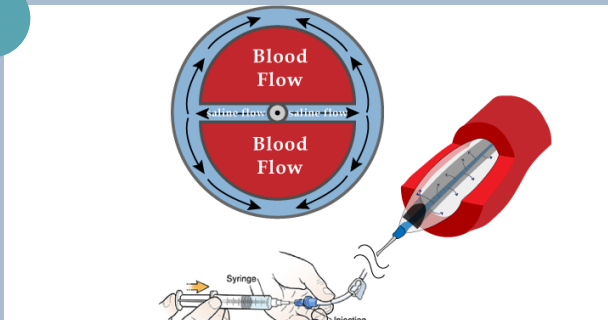
Utilizing current techniques for placement, the deflated balloon is located at the site of the defect.

2



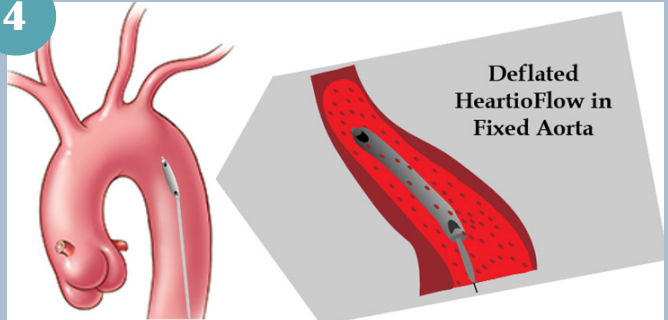
The physician injects saline into the catheter, which will disseminate through the center of the balloon for uniform inflation.

3



After the balloon is fully inflated, the dual semicircle channels allow for 50% of normal blood flow during the balloon angioplasty procedure.

4



Before removing the balloon catheter, the physician removes the saline to deflate the balloon. The vessel remains in a set, corrected position.

PRODUCT VALUE

Will Reduce the Economic Burden on Families

Procedures

80,000
Procedures
Annually

\$30,000
For a Balloon
Angioplasty

Complications

14%
Result in
Aneurysm

\$21,000
To Treat an
Aneurysm

5%
Result in
Thrombosis

\$5,580
To Treat a
Thrombosis

Feature	Current Balloons	Heartio-Flow
Does not fully occlude blood flow	✗	✓
Option to remain inflated longer with less risk to patient	✗	✓
Uniform Inflation	✓	✓
Biocompatible	✓	✓
Easy to use	✓	✓