

Atrioventricular Canal, AV Canal

Normal Heart

The normal heart has four chambers. The two top chambers receive blood from the body and lungs. These chambers are called the atria. The two bottom chambers pump blood to the body and lungs. These are called the ventricles. These chambers are separated by walls known as the atrial septum and ventricular septum. In between the atria and ventricles are valves. On the right side is the tricuspid valve. On the left side is the mitral valve.

An AV canal is a congenital (present at birth) heart defect. In this condition there is no wall between the chambers of the heart. The middle part of the heart did not form correctly in the womb.

There are two types of AV canal, complete and partial. In a complete AV canal, there is an atrial septal defect (ASD) and ventricular septal defect (VSD). There is one common AV valve instead of two valves. In a partial AV canal only an ASD is present. There are two valves but often the mitral valve has an opening, or cleft, in it.

The cause of AV canal is unknown. It is often seen with Down syndrome.

The lack of a wall between the two sides of the heart can cause extra blood to flow to the lungs.

Signs and Symptoms

In an infant, symptoms include

- Tiring easily.

- Not eating or growing well
- Frequent pneumonia.
- Rapid breathing.
- Sweating.

Older children may have trouble growing or tire easily.

Your health care provider may hear an abnormal heart sound when listening with a stethoscope.

Testing

A member of the health care team will do a complete exam and a health history.

An ultrasound of the heart, an echocardiogram, will be done to confirm the presence of the defect. An ECG, electrocardiogram, may also be done to look at the heart's electrical activity.

Treatment

Surgery is often needed at some point with both complete and partial AV canal defects. Sometimes these will be treated with medicines to help control the effects of an AV canal before they have surgery. Your cardiologist will discuss the options for treatment.

Who Do I Call With Questions?

The doctor or nurse or our clinic staff can answer any questions. Pediatric Cardiology
(608) 263-6420

Adult Congenital Heart Disease **(608) 890-5700**

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 10/2017. University of Wisconsin Hospital and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#6865