

# A New Classification for Congenital Heart Anomalies: RPKSAI CHACS

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**Abstract:** *This article introduces the RPKSAI Congenital Heart Anomaly Classification System CHACS, a new framework for categorizing congenital heart defects. The system organizes anomalies into six components: looping patterns, septation, chamber formation, valve anomalies, vascular anomalies, and additional anomalies. Each component includes specific types of defects, and the system allows for a precise combination of codes to represent complex cases. This new classification aims to improve communication, research, and data analysis in the field of congenital heart defects.*

**Keywords:** Congenital heart anomalies, CHACS, RPKSAI classification, cardiac defects, medical classification system

I am hereby proposing a simple all - inclusive classification for Congenital Heart Anomalies

## RPKSAI - Congenital Heart Anomaly Classification System (CHACS)

### Component 1:

#### Looping Pattern (LP)

- D - Loop (Normal): D
- L - Loop (Normal): L
- D - Loop Reversal: DR
- L - Loop Reversal: LR
- Incomplete Looping: IL
- Excessive Looping: EL

### Component 2:

#### Septation (S)

- Normal Septation: NS
- Ventricular Septal Defect (VSD): VS
- Atrial Septal Defect (ASD): AS
- Abnormal Septation: AS

### Component 3: Chamber Formation (CF)

- Normal Chamber Formation: NCF
- Abnormal Chamber Formation: AC
- Single Ventricle: SV
- Double Outlet Right Ventricle (DORV): DORV
- Double Outlet Left Ventricle (DOLV): DOLV

### Component 4: Valve Anomalies (VA)

- Normal Valves: NV
- Tricuspid Atresia (TA): TA
- Pulmonary Atresia (PA): PA
- Aortic Atresia (AA): AA
- Mitral Atresia (MA): MA

### Component 5:

- Vascular Anomalies (VA)
- Normal Vascular Pattern: NV
- Transposition of the Great Arteries (TGA): TGA
- Patent Ductus Arteriosus (PDA): PDA
- Coarctation of the Aorta (COA): COA

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- Interrupted Aortic Arch (IAA): IAA

**Component 6:**

**Additional Anomalies (AA)**

- Coronary Artery Anomalies: CA
- Cardiac Tumours: CT
- Cardiac Cysts: CC
- Other Anomalies: OA

**Classification Format:**

- Use a combination of letters to represent a specific congenital heart anomaly. For example:
- TGA with D - Loop Reversal, Excessive Looping, and Abnormal Septation: DR + EL + AS + TGA
- DORV with D - Loop Reversal, Incomplete Looping, and Abnormal Chamber Formation: DR + IL + AC + DORV

**Example Codes:**

- DR + EL + AS + TGA (Transposition of the Great Arteries)
- LR + IL + AC + DOLV (Double Outlet Left Ventricle)
- DR + IL + EL + AS + AC + TOF (Tetralogy of Fallot)
- LR + EL + AS + AC + PA (Pulmonary Atresia)

**Advantages:**

- Captures complexity of congenital heart defects
- Allows for precise classification and communication
- Facilitates research and data analysis
- Can be used in conjunction with other classification systems