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CONTENTS

<i>List of Abbreviations</i>	VI
Describing cardiac relations and connections	2
Cardiopulmonary bypass	6
Partial anomalous pulmonary venous connection	12
Total anomalous pulmonary venous connection	18
Cor triatriatum sinister	22
Atrial septal defect	26
Ventricular septal defect	30
Partial atrioventricular septal defect	34
Complete atrioventricular septal defect and transitional AVSD	38
Ebstein malformation of tricuspid valve	44
Mitral valve dysplasia	50
Hypoplastic left heart syndrome	56
Tricuspid atresia	60
Double inlet left ventricle	64
Pulmonary atresia with intact ventricular septum	68
Surgical strategies for functionally univentricular hearts	74

Tetralogy of Fallot with pulmonary stenosis	82
Tetralogy of Fallot with absent pulmonary valve	88
Tetralogy of Fallot with pulmonary atresia	92
Transposition of the great arteries with intact ventricular septum	96
Complex transposition of the great arteries	100
Congenitally corrected transposition of the great arteries	106
Double outlet right ventricle	112
Left ventricular outflow tract obstructions	116
Truncus arteriosus communis	122
Aortopulmonary window	128
Anomalous aortic origin of a coronary artery	132
Anomalous origin of a coronary artery from the pulmonary artery	136
Patent ductus arteriosus	142
Coarctation of the aorta	146
Interruption of the aortic arch	152
Vascular rings and slings	158
Heterotaxy	164

Cardiac tumors	168
Extracorporeal membrane oxygenation	172
Ventricular assist devices	182
Orthotopic heart transplant	190
<i>References</i>	196

List of Abbreviations

AA, Aortic Atresia

AAOCA, Anomalous Aortic Origin of the Coronary Artery

AAOLCA, Anomalous Aortic Origin of the Left Coronary Artery

AAORCA, Anomalous Aortic Origin of the Right Coronary Artery

ABG, Arterial Blood Gas

ACEi, ACE inhibitors

ALCAPA, Anomalous Origin of the Left Coronary Artery from the Pulmonary Artery

ARCAPA, Anomalous Origin of the Right Coronary Artery from the Pulmonary Artery

AoV, Aortic Valve

AS, Aortic Stenosis

ASD, Atrial Septal Defect

ASO, Arterial Switch Operation

AV, Atrioventricular

AVR, Aortic Valve Replacement

AVV, Atrioventricular Valve

BDG, Bidirectional Glenn

CABG, Coronary Artery Bypass Grafting

cAVSD, Complete Atrioventricular Septal Defect

ccTGA, congenitally corrected Transposition of the Great Arteries

CHD, Congenital Heart Disease

CHF, Congestive Heart Failure

CoA, Coarctation of the Aorta

CPB, Cardio-pulmonary Bypass

CVP, Central Venous Pressure

DILV, Double Inlet Left Ventricle
DKS, Damus-Kaye-Stansel
DORV, Double-Outlet Right Ventricle
EFE, Endocardial Fibroelastosis
HFOV, High Frequency Oscillatory Ventilation
HOCM, Hypertrophic Obstructive
Cardiomyopathy
HR, Heart Rate
IAA, Interrupted Aortic Arch
IABP, Intra-Aortic Balloon Pump
IBL, Inferior Bridging Leaflet
iNO, Inhaled Nitric Oxide
IVC, Inferior Vena Cava
JET, Junctional Ectopic Tachycardia
LA, Left Atrium
LAD, Left Anterior Descending Coronary Artery
LAP, Left Atrial Pressure
LAVV, Left Atrioventricular Valve
LCA, Left Coronary Artery
LCS, Left Coronary Sinus
LCx, Left Circumflex Coronary Artery
LPA, Left Pulmonary Artery
LSA, Left Subclavian Artery
LV, Left Ventricle
LVEF, Left Ventricle Ejection Fraction
LVESD, Left Ventricle End-Systolic Diameter
LVOT, Left Ventricular Outflow Tract
LVOTO, Left Ventricular Outflow Tract
Obstruction
MA, Mitral Atresia
MAP, Mean Airway Pressure

MAPCA(s), Major Aortopulmonary Collateral(s)
mBTTs, modified Blalock-Taussig-Thomas Shunt
mLV, morphologic Left Ventricle
MOF, Multi-organ failure
MR, Mitral Regurgitation
mRV, morphologic Right Ventricle
MS, Mitral Stenosis
MV, Mitral Valve
NCS, Noncoronary Sinus
NEC, Necrotizing Enterocolitis
NMB, Neuromuscular Blockade
NRGA, Normally Related Great Arteries
NSAIDs, Non-Steroidal Anti-inflammatory Drugs
OR, Operating Room
OHT, Orthotopic Heart Transplant
PA, Pulmonary Atresia
PA/IVS, Pulmonary Atresia and Intact Ventricular Septum
PAB, Pulmonary Artery Banding
PAP, Pulmonary Artery Pressure
PAPVC, Partial Anomalous Pulmonary Venous Connection
pAVSD, Partial Atrioventricular Septal Defect
PBF, Pulmonary Blood Flow
PDA, Patent Ductus Arteriosus
PEEP, Positive End-Expiratory Pressure
PGE1, Prostaglandin E1
PH, Pulmonary Hypertension
PS, Pulmonary Stenosis
PTFE, polytetrafluoroethylene

PV(s), Pulmonary Vein(s)
PV, Pulmonary Valve
PVOD, Pulmonary Vascular Obstructive Disease
PVR, Pulmonary Vascular Resistances
RA, Right Atrium
RBBB, Right Bundle Branch Block.
RCA, Right Coronary Artery
RCS, Right Coronary Sinus
RPA, Right Pulmonary Artery
RV, Right Ventricle
RV-PA Conduit, Right Ventricle to Pulmonary Artery Conduit
RVDCC, Right ventricular dependent coronary artery circulation
RVOTO, Right Ventricular Outflow Obstruction
SBF, Systemic Blood Flow
SBL, Superior Bridging Leaflet
SVC, Superior Vena Cava
SVR, Systemic Vascular Resistances
TAC, Truncus Arteriosus Communis
TAPVC, Total Anomalous Pulmonary Venous Connection
TCPC, Total Cavopulmonary Connection
TGA, Transposition of the Great Arteries
TOF, Tetralogy of Fallot
TV, Tricuspid Valve
VA, Venoarterial
VAD, Ventricular Assist Device
VSD, Ventricular Septal Defect
WU, Woods Units

Describing cardiac relations and connections

Segmental approach to describe cardiac relations

Developed by Stella and Richard **Van Praagh**.

Based on the relations of the **three major cardiac segments**: atrial chambers, ventricles, and arterial trunks.

Three letters coded in braces “{}” to describe the segments:

1. Sidedness of atrial chambers = atrial “situs”
2. Ventricular topology = ventricular “loop”
3. Relationships of the arterial trunks in space

Choices for the **first letter**:

- “S” = “situs solitus” = normal arrangement
- “I” = “situs inversus” = mirror-imaged arrangement
- “A” = “situs ambiguus”
- “X” = unknown

Choices for the **second letter**:

- “D” = D-loop
- “L” = L-loop
- “X” = looping cannot be determined

Choices for the **third letter**:

- “S” = NRGAs
- “I” = inverted/mirror-imaged NRGAs
- “D” = D-transposed/D-malposed great arteries = aorta to the right of the MPA
- “L” = L-transposed/L-malposed great arteries = aorta to the left of the MPA
- “A” = aorta directly anterior to the pulmonary trunk

Normal heart = “{S,D,S}”

Sequential segmental approach to describe cardiac connections

Developed by Robert H. **Anderson**.

Based on the anatomy of the cardiac components and the junctions (i.e., connections) between them.

Description of **atrial chambers** based on the morphology of their appendages:

- Usual/normally arranged
- Mirror-imaged
- Isomerism of the morphologically left atrial appendages
- Isomerism of the morphologically right atrial appendages

Description of the **AV junctions** based on how the atrial and ventricular chambers are joined together:

- Concordant AV connections
- Discordant AV connections
- Biventricular and mixed AV connections
- Double inlet AV connections
- Absent left AV connections
- Absent right AV connections

Description of **valves** guarding the junctions:

- Two perforate valves
- One single perforate valve with an absent AV connection
- One single perforate with one imperforate valve
- Common valve
- Absent valve with a “unguarded orifice”

Describing cardiac relations and connections

Description of the **ventriculo-arterial junctions** based on the way the arterial trunks origin from the ventricles, the infundibular morphologies, the morphology of the arterial valves, and the relationships of the arterial trunks in space

- Concordant ventriculoarterial connections
- Discordant ventriculoarterial connections
- Concordant ventriculoarterial connections with parallel great arteries (anatomically corrected malposition)
- Single outlet with common arterial trunk
- Single outlet with PA
- Single outlet with AA
- Double outlet
- DORV
- Double outlet LV

Normal heart = usual/normally arranged atrial arrangement with concordant AV connections and concordant ventriculo-arterial connections.