Bulbus cordis elongates and this part can be divided into:

1. Proximal *bulbus cordis*,
2. Middle *conus cordis* and
3. Distal *truncus arteriosus*. 
Formation of aortico-pulmonary septum (spiral septum)
LT BULBAR RIDGE
ANT. SECONDARY BULBAR RIDGE
POST. SECONDARY BULBAR RIDGE
BULBUS CORDIS CAVITY
RT BULBAR RIDGE
PULMONARY TRUNK
AORTIC TRUNK
Fused valve cusps
Fused valve cusps
Normal semilunar valve
Pulmonary valve stenosis
Aortic valve stenosis
Fate of bulbus cordis

• **Truncus arteriosus-** aortico-pulmonary septum divides it into Aorta and Pulmonary trunk

• **Conus cordis-** left half of conus cordis gets incorporated in left ventricle to form the *aortic vestibule*
  • right half of conus cordis gets incorporated in right ventricle to form the *pulmonary infundibulum*

• **Proximal part-** gets incorporated in right and left ventricles
INTERVENTRICULAR SEPTUM

1. Lower, fleshy part of IV septum is formed by growth from the ventricular wall

2. Upper, membranous part is formed below by fused endocardial cushions and above by the fused right and left bulbar ridges.

The membranous part of IV septum separates

right ventricle from left ventricle and also left ventricle from right atrium.
DEVELOPMENT OF RIGHT VENTRICLE

i) By the right half of primitive ventricular chamber & proximal bulbus cordis and

ii) Its outflow part (infundibulum) is formed by right half of conus cordis.

DEVELOPMENT OF LEFT VENTRICLE

i) By the left half of primitive ventricular chamber & proximal bulbus cordis and

ii) Its outflow part (vestibule) is formed by left half of conus cordis.
PATENT FORAMEN OVALE
VSD (MEMBRANOUS PART)
COBINED ASD & VSD
FALLOT’S TETRALOGY
PERSISTENT TRUNCUS ARTERIOSUS
TRANSPOSITION OF GREAT VESSELS
AORTIC VALVULAR STENOSIS

AORTIC VALVULAR ATRESIA
ECTOPIA CORDIS

(CLEFT STERNUM WITH BILATERAL CLEFT LIP)
BICUSPID AORTIC VALVE
CONGENITAL ANOMALIES OF HEART

I. Anomalies of position:
   i). Dextrocardia (generally associated with situs inversus)
   ii). Ectopia cordis (failure to fusion of two sternal plates)

II. Anomalies of interatrial septum:
   i). Probe patency (20-25% cases)
   ii). Persistent foramen secundum
   iii). Persistent foramen ovale
   iv). Premature closure of foramen ovale
   v). Three chambered heart (failure of formation of inter atrial septum)

   cor triloculare biventriculare

III. Anomalies of interventricular septum:
   a. ventricular septal defect
   b. absence of ventricular septum-cor triloculare biatriale
IV. Anomalies of *truncus arteriosus* and *bulbus cordis*:

i). Fallot’s tetralogy comprises

   a) Pulmonary stenosis

   b) Overriding aorta

   c) Persistent IV foramen (VSD in membranous IV septum)

   d) Hypertrophy of right ventricle

ii). Persistent truncus arteriosus

iii). Transposition of great vessels

V. Anomalies of *valves*:

   Stenosis/ atresia of pulmonary, aortic, mitral or tricuspid valves