



DORV Anatomy and the variants

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Brompton Cardiac Morphology
Website: www.rbht.nhs.uk/cardiacMorphology

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What is DORV ?

A form of ventriculo-arterial connection: Hearts in which the great arteries, for their greater part, are supported by the morphologically right ventricle

DORV can exist with any pattern of atrial arrangement (situs), any pattern of atrioventricular connections



Rarely without a VSD (interventricular communication)



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Malalignment of outlet septum

Overriding of the aortic or pulmonary valve across VSD

>50% override of the valve
DORV

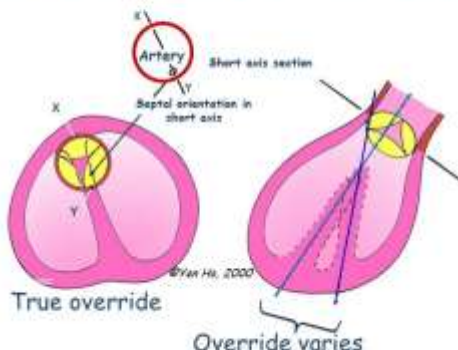
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A form of ventriculo-arterial connection: Hearts in which the great arteries, for their greater part, are supported by the morphologically RV

Assessment of Arterial Override: 50% rule ?



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• Usual atrial arrangement and concordant atrioventricular connections

Physiology varies :

- simple VSD-like
- Fallot
- Transposition
- single ventricle

Synonyms and other names:
Taussig-Bing malformation; tetralogy of Fallot with extreme dextroposition of the aorta; Eisenmenger's anomaly (Eisenmenger VSD)



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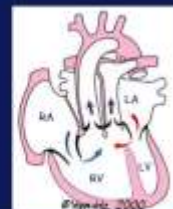
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• Usual atrial arrangement and concordant atrioventricular connections

VSD (almost) always present

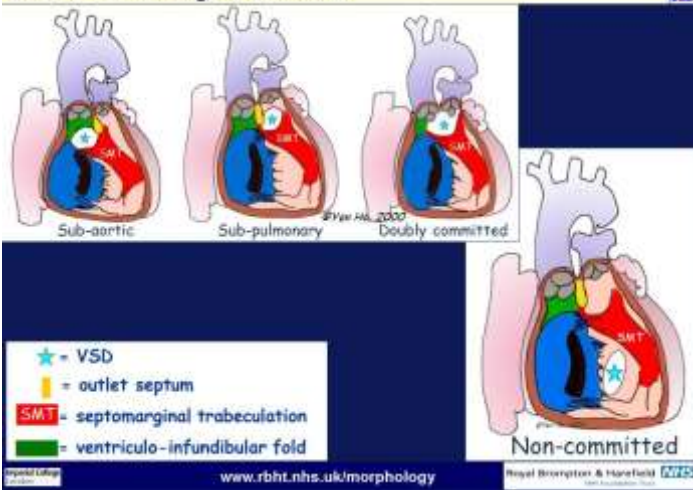
- subaortic VSD with PS (Fallot type)
- subpulmonary VSD (Taussig-Bing / transposition type)
- subaortic VSD without PS (Eisenmenger anomaly)
- doubly committed VSD
- non-committed VSD



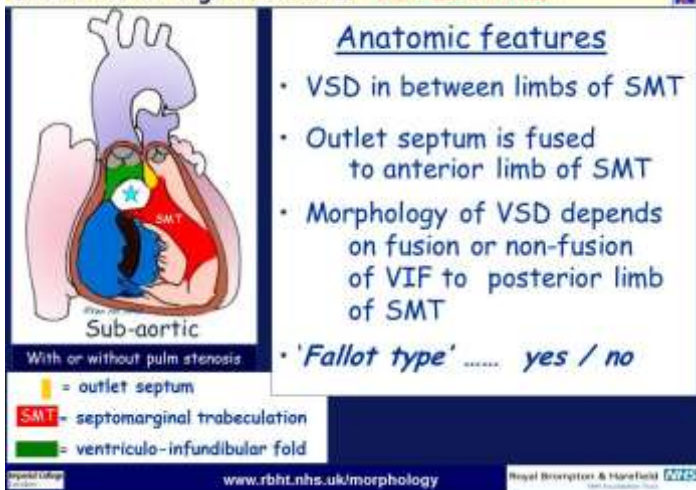
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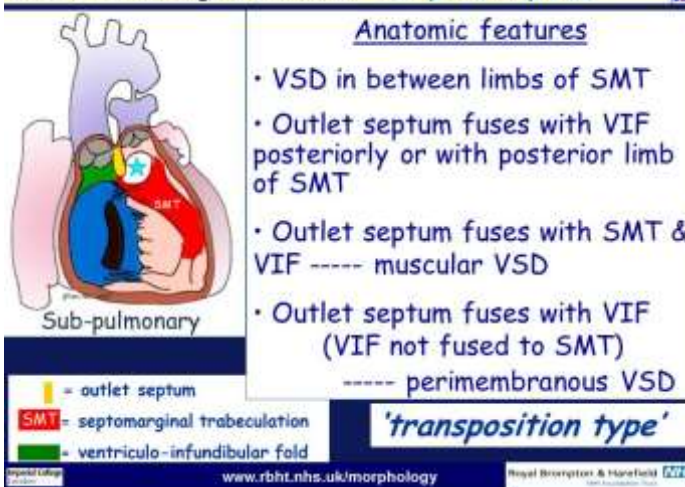
Double Outlet Right Ventricle



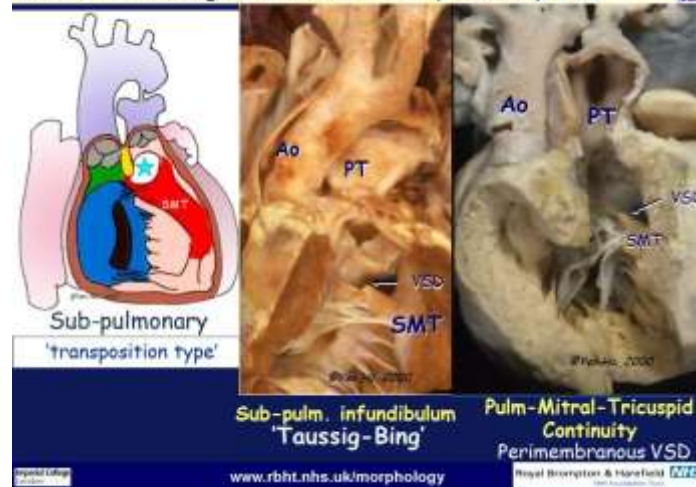
Double Outlet Right Ventricle: sub-aortic VSD



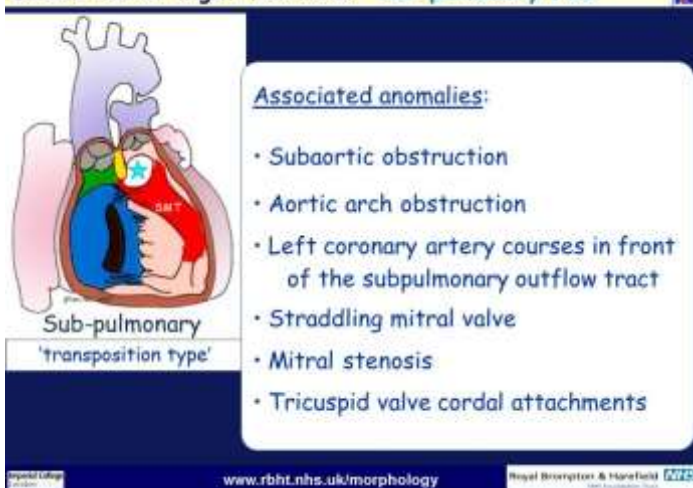
Double Outlet Right Ventricle: sub-pulmonary VSD



Double Outlet Right Ventricle: sub-pulmonary VSD



Double Outlet Right Ventricle: sub-pulmonary VSD



Double Outlet Right Ventricle: sub-pulmonary VSD





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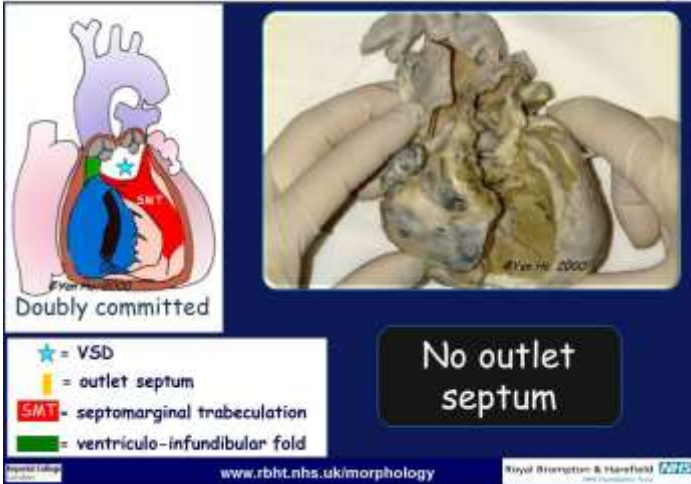
Subaortic obstruction (RV outflow)

- * Muscular infundibulum
- * Anomalous muscle bundles
- * Anomalous tension apparatus
- * Deviated outlet septum (with VSD)

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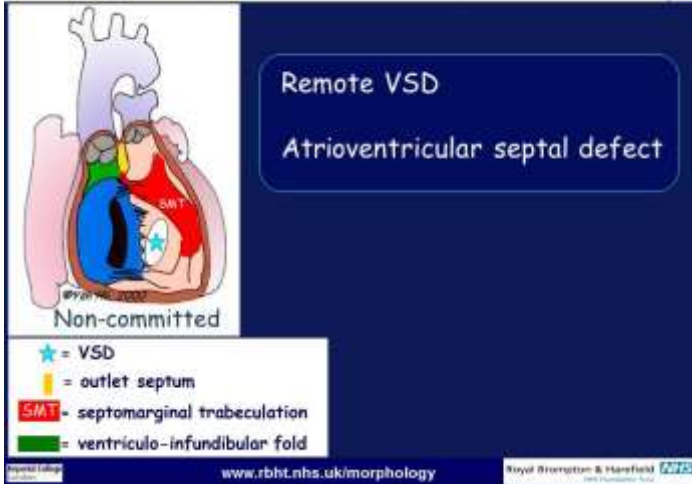
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Analyse ventriculo-arterial connections independent of: Position of great arteries
Bilateral or single infundibulum

- Location and size of VSD
- Presence or absence of pulmonary or aortic outflow tract obstruction
- Other associated malformations

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