

CONGENTALE HARTCHIRURGIE



JOLA EVENS

KINDERHARTLONGCHIRURG

WKZ UMC UTRECHT BIEPER #11 5132

CONGENTAAL = BIJ GEBORTE AANWEZIG

■ NEONATEN =
PASGEBORENEN



■ PREMATUREN = TE VROEG GEBORENEN



■ DYSMATUREN = NIET GOED ONTWIKKELDEN

KLEINSTE PATIËNT

- 650 GRAM
- PDA = PATENTE DUCTUS ARTERIOSUS
- DUCTUS BOTALLI
BEHOORT VANZELF TE SLUITEN
OF D.M.V. INDOMETACINE



GROOTSTE PATIËNT

■ 18 JAAR

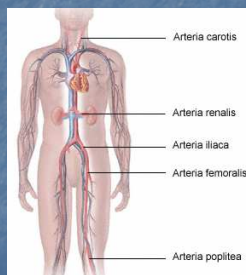


■ ALS OUDER (VANAF 19 JAAR)
DAN GUCH = GROWN UP
WITH CONGENITAL HEART DISEASE

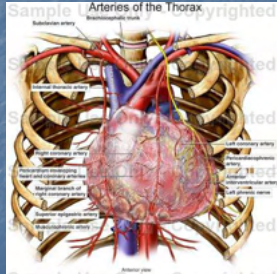
BORSTKAS = THORAX



SLAGADERS = ARTERIËN ADERS = VENEN

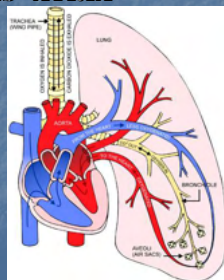


HATZAKJE = PERICARD



1 HART = 4 HARTKAMERS

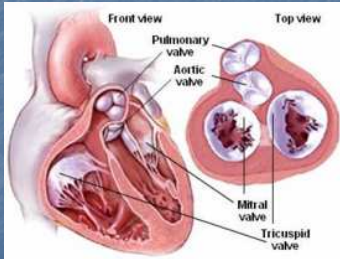
- 2 VOORKAMERS=BOEZEMS=ATRIA
- 2 KAMERS=VENTRIKELS



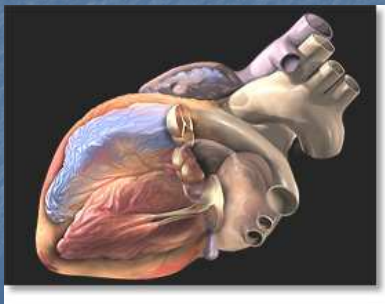
4 HARTKLEPPEN

- 2 AV-KLEPPEN: TSS VOORKAMERS EN KAMERS
- 2 SEMILUNAIRE KLEPPEN = 'UITGANG'DEUREN
- RECHTER ATRIOVENTRICULAIRE KLEP= TRICUSPIDALISKLEP
- LINKER ATRIOVENTRICULAIRE KLEP= MITRALISKLEP
- AORTA KLEP = UITGANG VAN LINKERHART
- PULMONALISKLEP = UITGANG VAN RECHTERHART

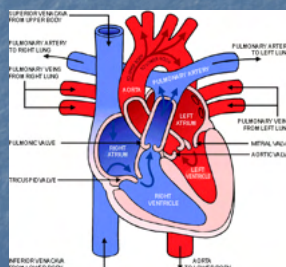
VOOR- EN BOVENAANZICHT



LINKER ZIJAANZICHT



ANATOMIE = GOED FUNDAMENT



'TOUTJES' CONGENTALE AANDOENINGEN

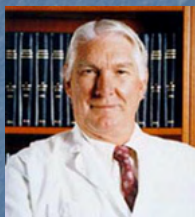


EVEN GOD MAKES MISTAKES,
WE TRY TO MANAGE THEM

VANDAAG BESPREKEN WE

- NORWOOD
- GLENN= PCPC= HEMI-FONTAN
- FONTAN=TCPC
- ASO= SWITCH
- RASHKIND
- TOF- REPAIR
- SEPTUMDEFECTEN
- COARCTATIO AORTAE
- PDA = ODB =OPEN DUCTUS BOTALLI

WILLIAM NORWOOD



HLHS HYPOPLASTISCH LINKERHARTSYNDROOM

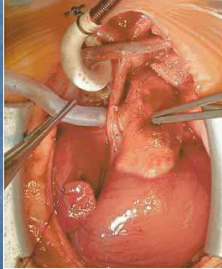


Abb. 1: HLHS mit Aorta asc. < 2 mm, Truncus pulmonalis, Goretex-Prothese am Truncus brachiocephalicus

HLHS : OPERATIE = "NORWOOD "

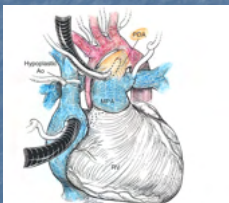


Fig. 30-4 Initial steps during stage I reconstruction for hypoplastic left heart syndrome. Aortopulmonary connection is accomplished through the distal main pulmonary artery and venous cannulation in the right atrial appendage with the Gore-Tex ventricular cannula. The aortic valve is exposed and clamped for occlusion during aortic reconstruction. Ao, aorta; MP, main pulmonary artery; PDA, patent ductus arteriosus; RV, right ventricle.

HLHS NORWOOD

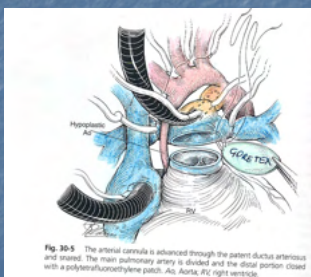


Fig. 30-5 The aortic cannula is advanced through the patent ductus arteriosus and snared. The main pulmonary artery is divided and the distal portion closed with a polytetrafluoroethylene patch. Ao, aorta; RV, right ventricle.

HLHS NORWOOD

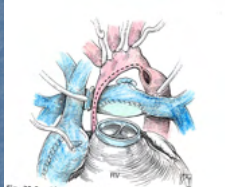
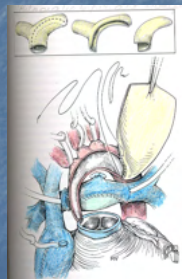


Fig. 30-4 After establishing circulatory arrest and excising the aortic septum, the main pulmonary artery is divided proximal to the bifurcation and the ductus is ligated. The remaining ductal tissue is excised completely from the aorta, and the resulting opening is extended both proximally and distally as shown. RV, Right ventricle.

HLHS NORWOOD



HLHS NORWOOD

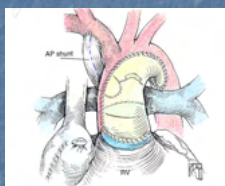
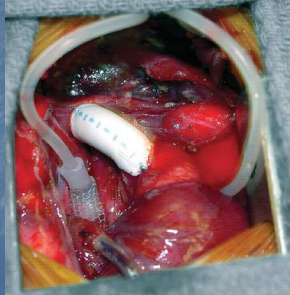


Fig. 30-6 The final appearance of the Norwood reconstruction is shown. AP, Aortopulmonary; RV, right ventricle.

GORETEX SHUNT (BUISPROTHESE)

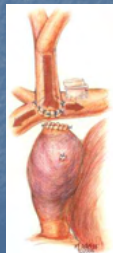


**TAUSSIG = KINDERCARDIOLOGE
DIE AORTOPULMONALE SHUNTIDEE
BEDACHT EN
NA HARDNEKKIG VOLHOUDEN
UTTEINDELIJK EEN CHIRURG (BLALOCK)
BEREID VOND HET OOK TE DOEN !**



HEMI- FONTAN CIRCULATIE

- **HEMI-FONTAN = NORWOOD II = PCPC =
BIDIRECTIONELE CAVOPULM. CONNECTIE =
GLENN ANASTOMOSE**
- **GEBEURT ROND 4-6^{DE} MAAND**



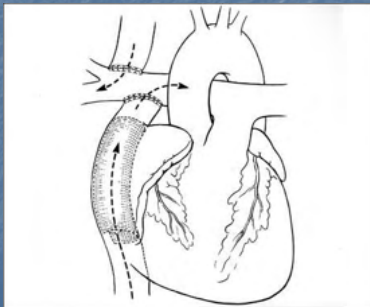
TCPC = "FONTAN"

TOTALE CAVO-PULMONALE CONNECTIE

- **GEBEURT ROND 2^{DE} LEVENSJAAR**
- **= NORWOOD III**



FONTANCIRCULATIE = EINDRESULTAAT BIJ HLHS



BB5' = BE BACK IN 5 MINUTES



CHIRURG MET (IN)ZICHT



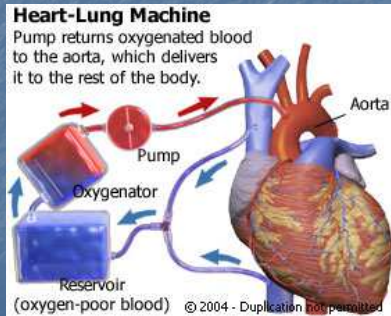
OPERATIE TEAM



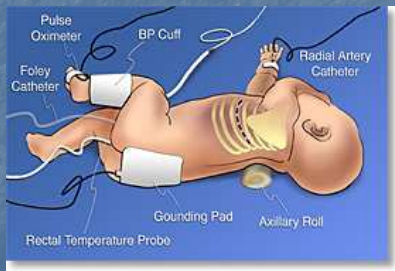
HARTLONGMACHINE



SCHEMA HLM



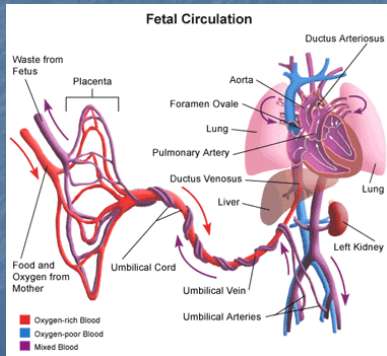
VOORBEREIDING VOOR THORACOTOMIE



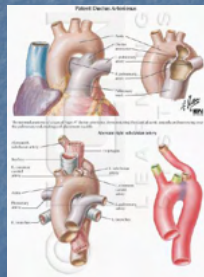
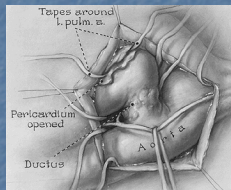
PDA = PATENTE DUCTUS ARTERIOSUS

- = ODB
- = OPEN DUCTUS BOTALLI
- = VERBINDING TUSSEN LONGSLAGADERS EN AORTA
- = NORMAAL IN FOETALE CIRCULATIE
- SLUIT NA GEBOORTE (EERSTE DAGEN)
- BIJ PREMATUREN SOMS INDOMETHACINE NODIG

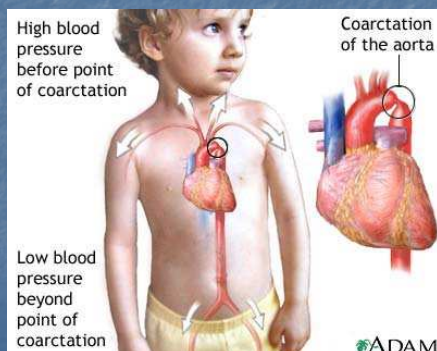
FOETALE CIRCULATIE



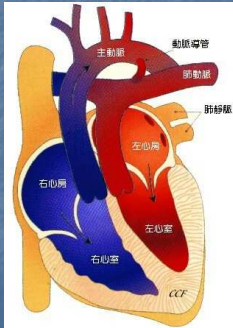
OPEN DUCTUS BOTALLI



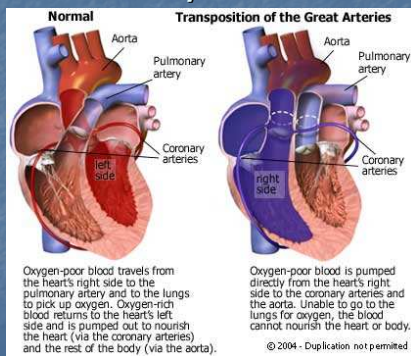
COARCTATIO AORTAE



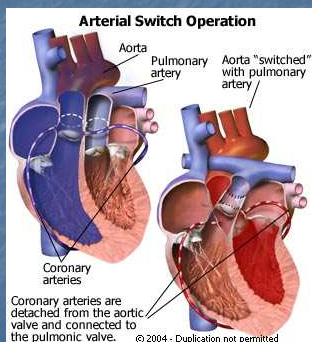
WAT IS DIT?



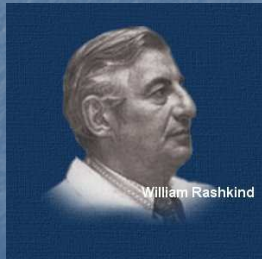
TGA = TRANSPOSITIE V/D GROTE ARTERIËN



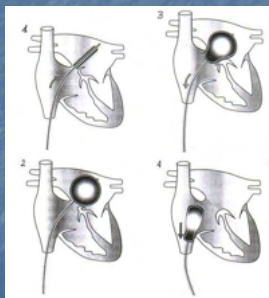
ASO= ARTERIEËLE SWITCH OPERATIE



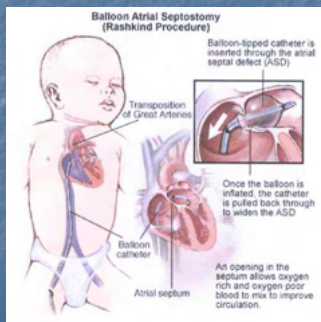
WILLIAM RASHKIND



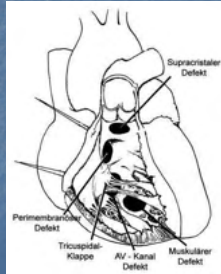
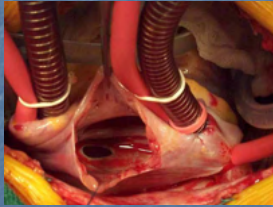
RASHKIND PROCEDURE= (GROTER) MAKEN VAN ASD



HANDIGE CARDIOLOOG



ASD VSD DEFECTEN VAN TUSSENSCHOTTEN



4 SOORTEN ASD'S

- **ASD I**
(VLAKBIJ AVKLEP + SPLEET IN MITRALISKLEP)
- **ASD II MEEST VOORKOMEND**
- **SINUS VENOSUS DEFECT**
(SUPERIOR BIJ VCS OF INFERIOR BIJ VCI GELEGEN)
- **CORONAIRE SINUS DEFECT**
(UNROOFED = ZONDER DAK)

VSD ALTIJD VANUIT RECHTERKAMER BEKEKEN/BESCHREVEN

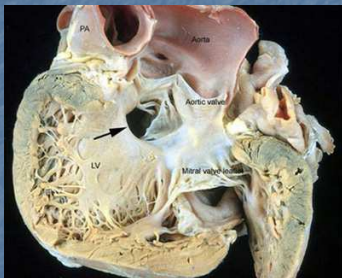
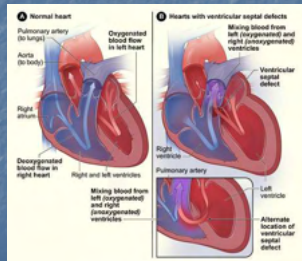


FOTO GEEFT DUS EEN BIJ LEVENDE MENS 'NOT DONE' VIEW

VSD EJECTIEGERUIS DOOR RELATIEVE PS

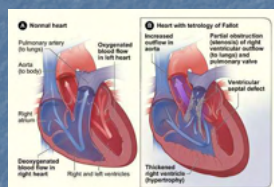


BLUE BABY



TETRALOGIE VAN FALLOT

- RVOT TE SMAL
- HYPERTROFIE VAN RV
- GROOT VSD
- OVERRIJDENDE AORTA



TOF: SQUATING / BETA BLOKKER (MEER BLOED NAAR LONGEN)

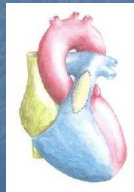
Children with Tetralogy of Fallot exhibit bluish skin during episodes of crying or feeding.



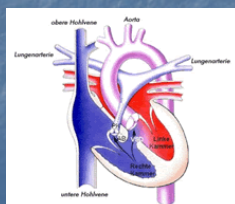
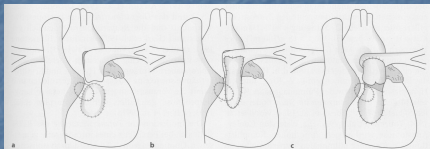
ADAM

TOF = TETRALOGIE VAN FALLOT

- PROBLEEM AAN DE RECHTERKANT
- ONVOLDOENDE BLOED NAAR DE LONGEN BIJ SPELS
- REPAIR VOOR 1^{STE} LEVENSJAAR
VROEGER ALS SPELS
OF SHUNT ZO TE KLEIN

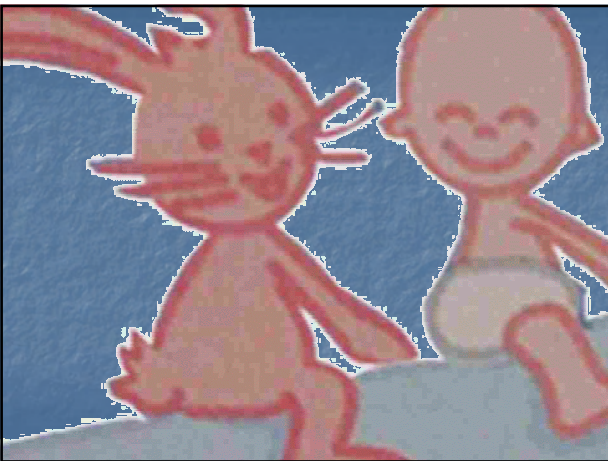


CORRECTIE TOF

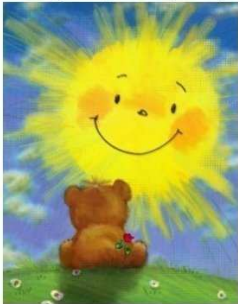


ANY QUESTIONS?





Sending a bit of sunshine your way.



Hope it helps to add some
Smiles to your day!