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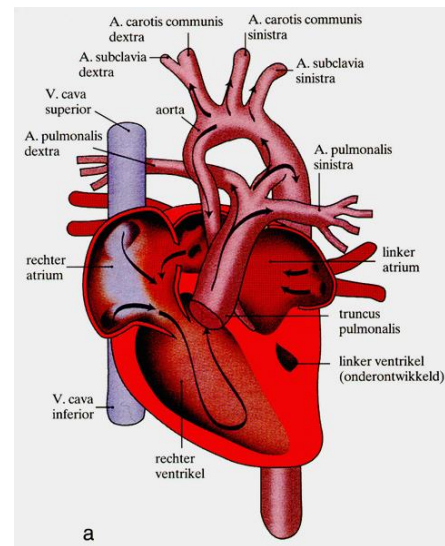
Hypoplastisch linker hart syndroom (HLHS)

diagnostiek na de geboorte (tot aan Norwood)

Lieke Rozendaal

Kindercardioloog

Willem Alexander Kinderziekenhuis, LUMC



No conflict of interest
(geen belangenverstrengeling)



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Indeling



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- Na de geboorte
- Diagnostiek
- Uitleg echo
- echobeelden
- Aandachtspunten voor de operatie



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Guidelines for the management of neonates and infants with hypoplastic left heart syndrome: The European Association for Cardio-Thoracic Surgery (EACTS) and the Association for European Paediatric and Congenital Cardiology (AEPC) Hypoplastic Left Heart Syndrome Guidelines Task Force

Nelson Alphonso^a, Annalisa Angelini^{b,†}, David J. Barron^{c,†}, Hannah Bellsham-Revell ^{d,†}, Nico A. Blom^{e,†},
Katherine Brown^f, Deborah Davis ^{g,h}, Daniel Duncan^h, Marny Fedrigo^{i,†}, Lorenzo Galletti^{j,†},
David Hehir^k, Ulrike Herberg ^{l,†}, Jeffrey P. Jacobs^{m,†}, Katarzyna Januszewska^{n,†}, Tom R. Karl ^{o,x,†}
(Chairman HLHS Guidelines Task Force), Edward Malec^{n,†}, Bohdan Maruszewski ^{p,†}, James Montgomerie^q,
Christian Pizzaro^{h,r,†}, Dietmar Schranz^{s,†}, Amanda J. Shillingford ^t and John M. Simpson^{u,†}

Na de geboorte



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- Geboortegewicht, zwangerschapsduur
- Verandering bloedsomloop
- Het in balans houden van bloed naar longen en lichaam
- Zuurstofgehalte onder controle
- Diagnostiek:
 - Diagnose bevestigen/vaststellen met echo
 - Tot aan de operatie blijven controleren en verbeteren van functie en verbindingen

Beeldvorming

- Echocardiografie

Aanvullend:

- CT scan
- MRI scan
- Angiografie



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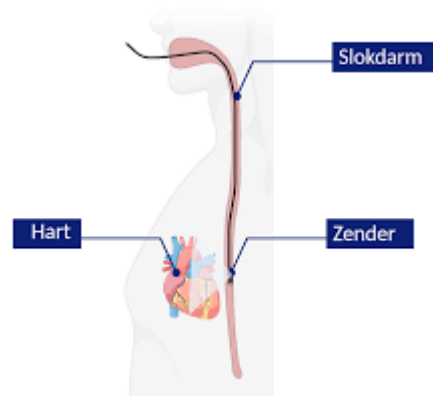


echocardiografie

- Geluidsgolven
- Overal te gebruiken
- Weinig belastend
- 2D en 3D, richting van bloed en snelheden
- Tijdens operatie:
 - slokdarmecho
 - epicardiaal (rechtsstreeks op het hart)



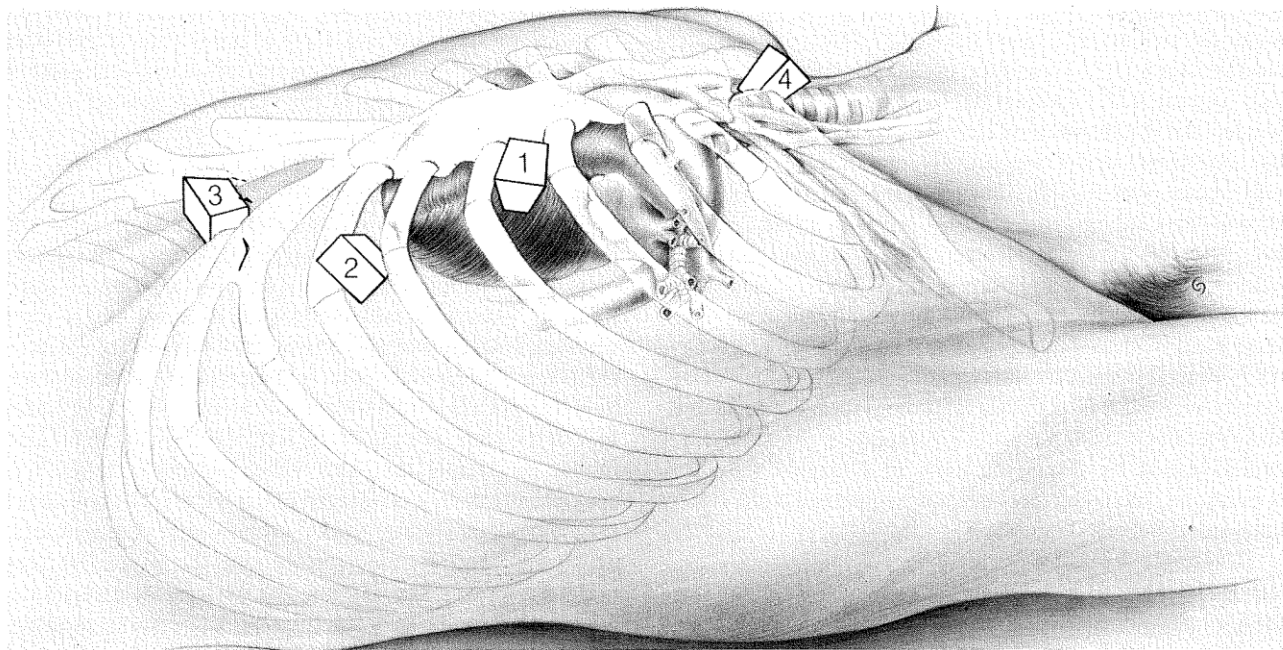
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Echobeelden van verschillende plekken



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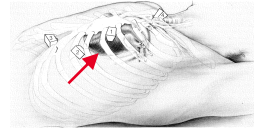
1: Parasternaal

2: Apicaal

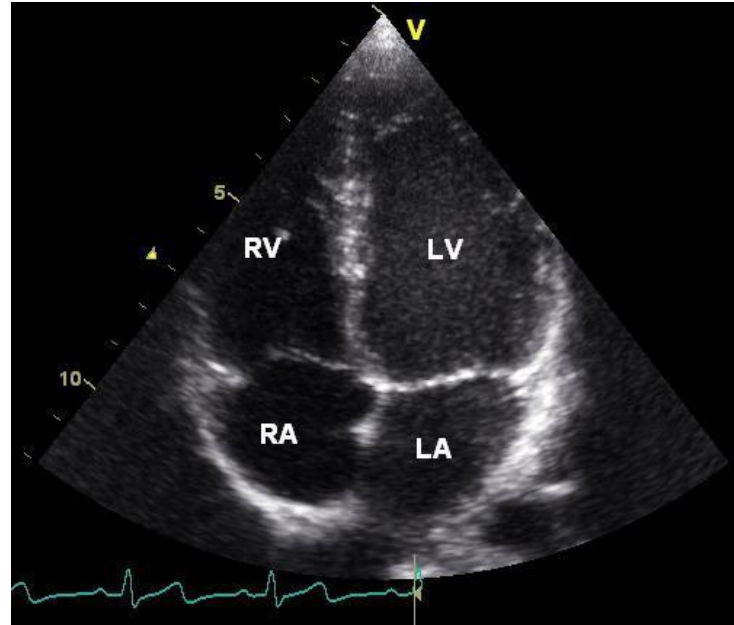
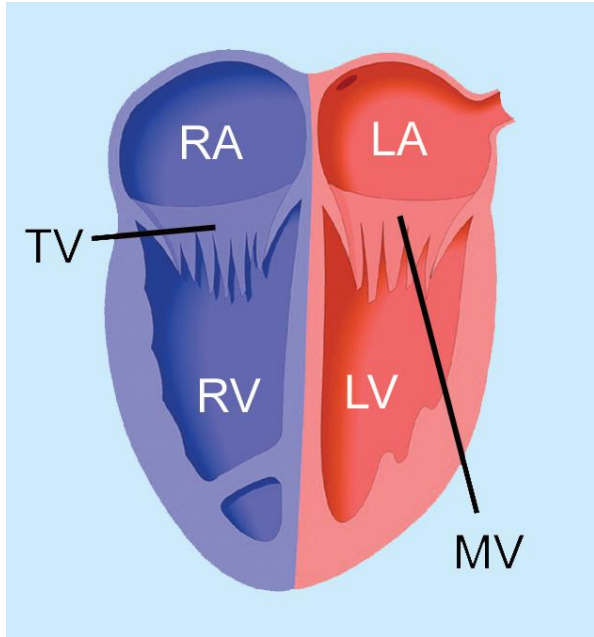
3: Subcostaal

4: Suprasternaal

Apicale views: 4-kamer



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Echo's gericht op de diagnose



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- Linker kamer (LV)
- Mitralisklep en aortaklep
- Longslagader (PV) en -takken
- aortaboog

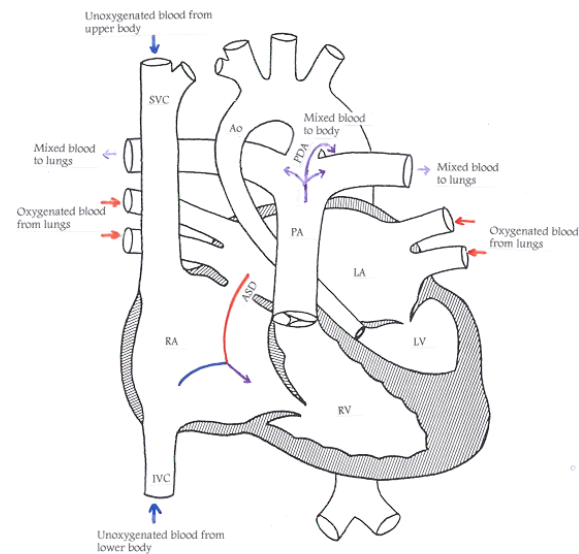
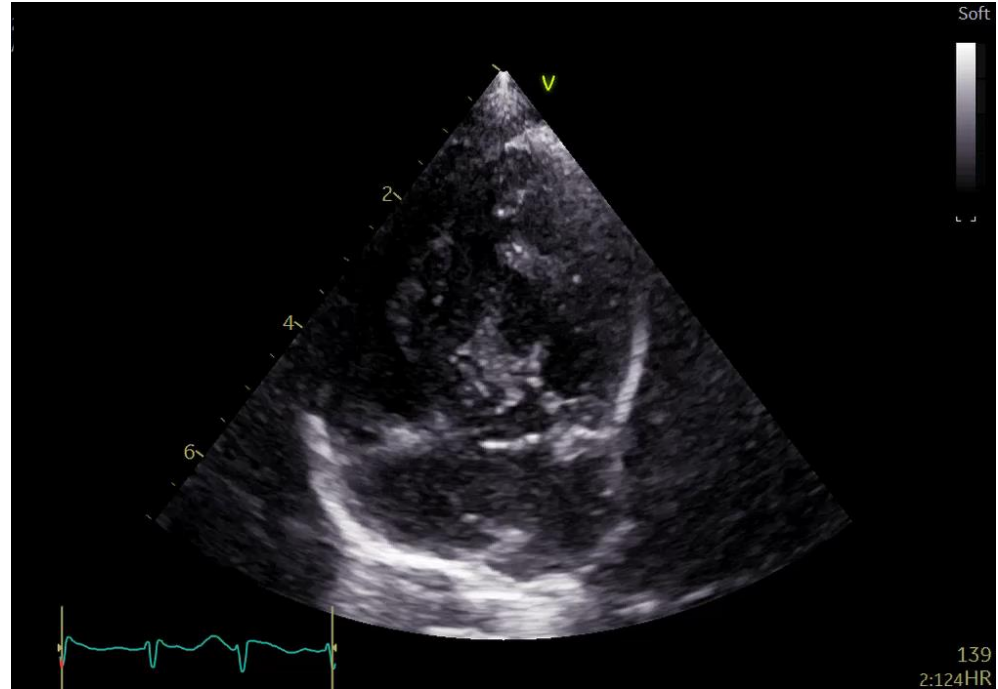
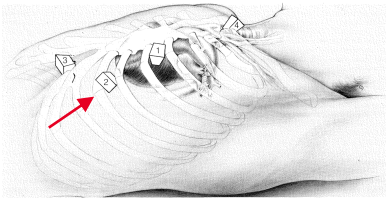
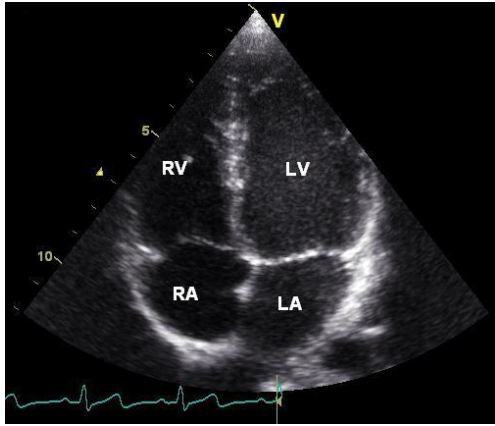


ILLUSTRATION 1 – Hypoplastic Left Heart Syndrome

Verschillende types



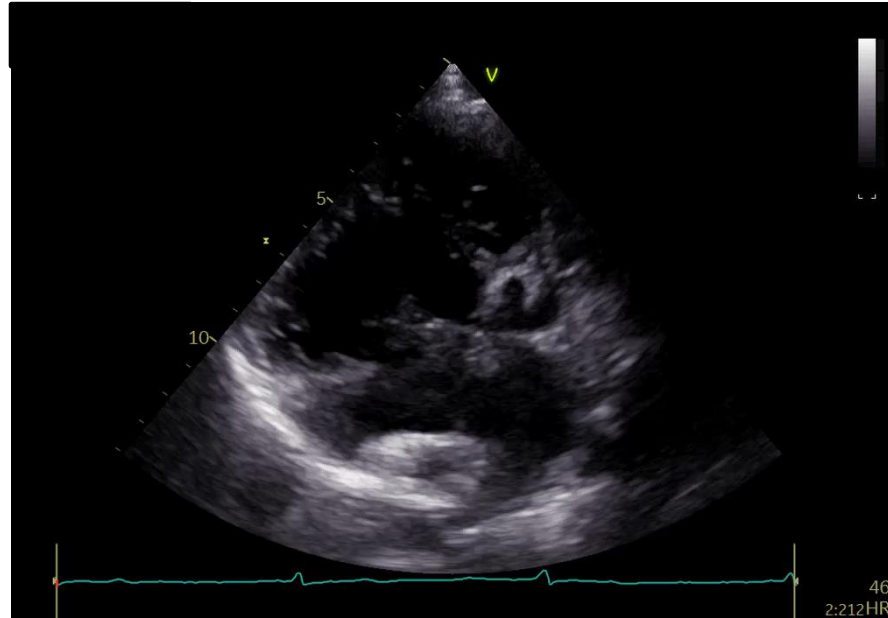
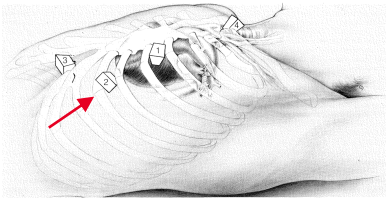
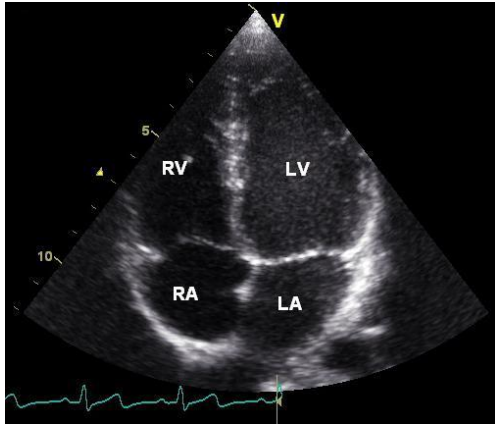
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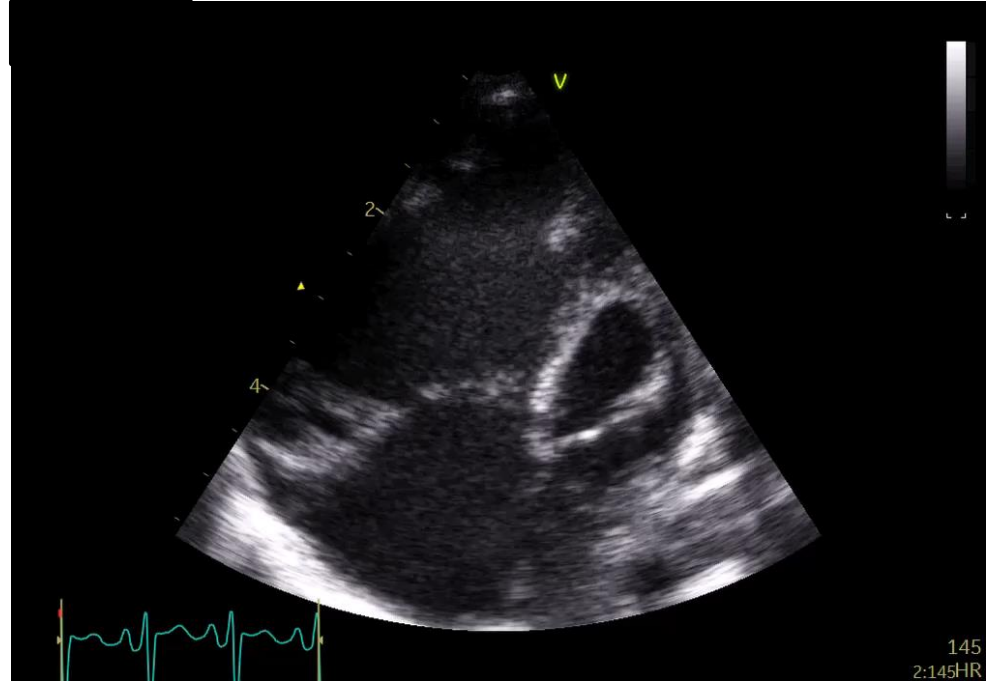
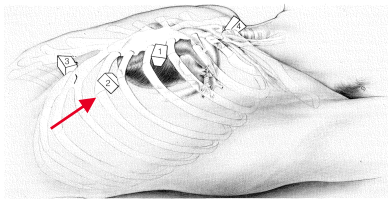
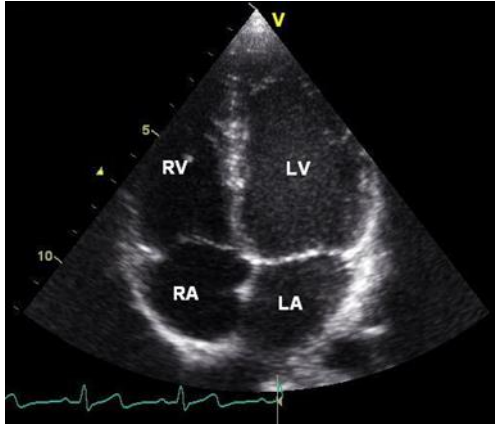
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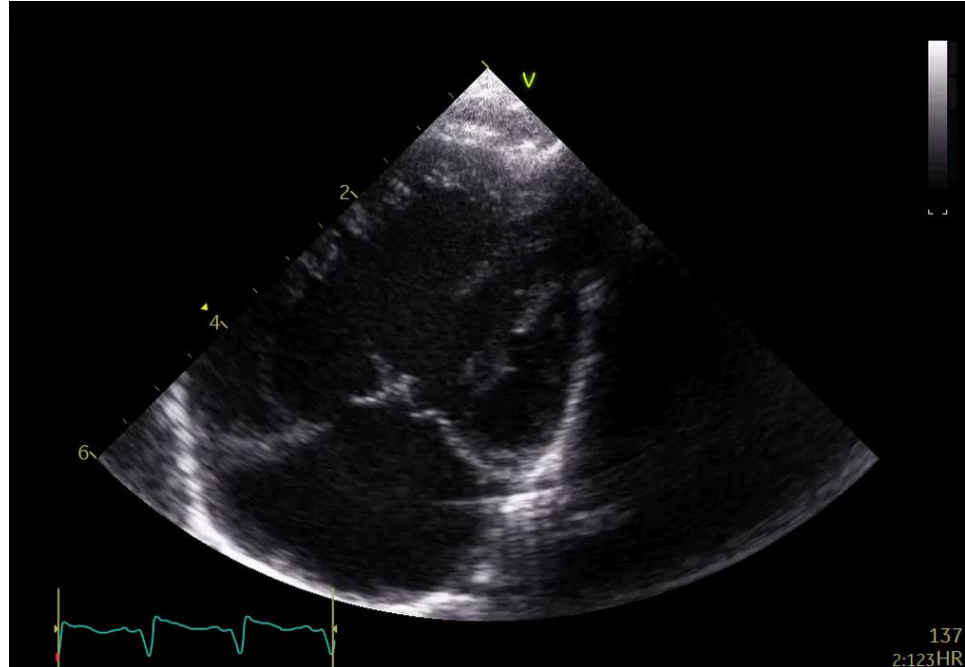
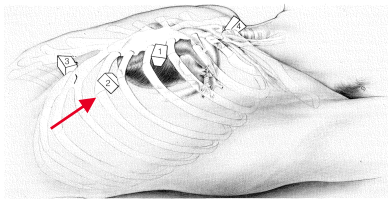
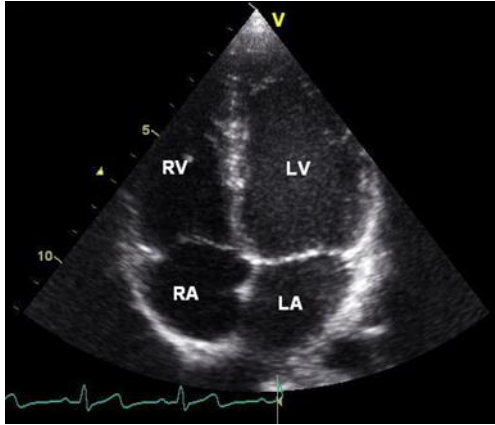
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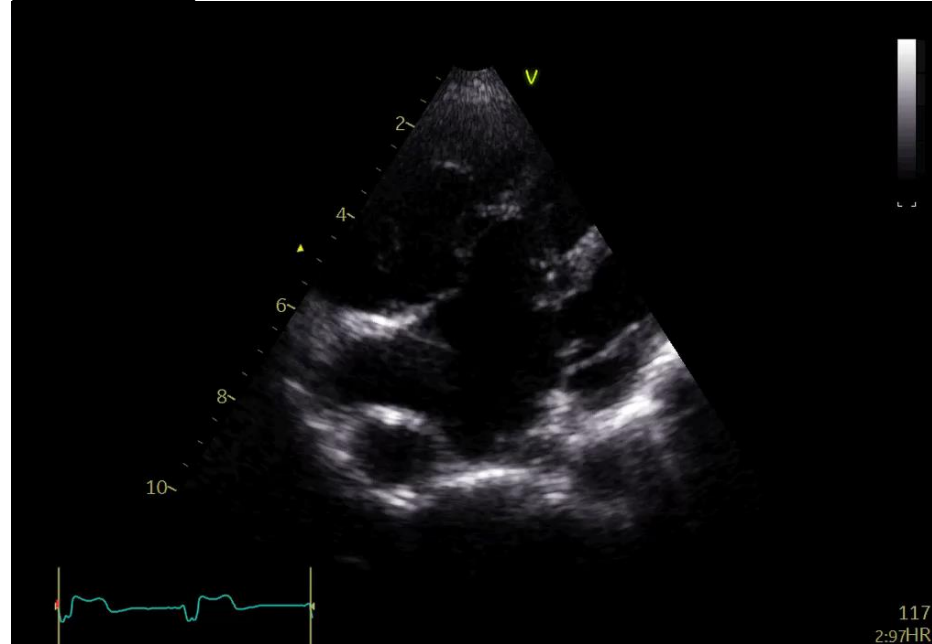
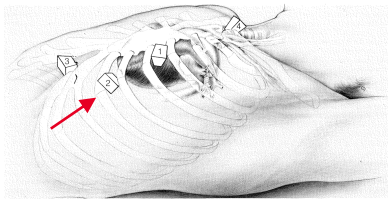
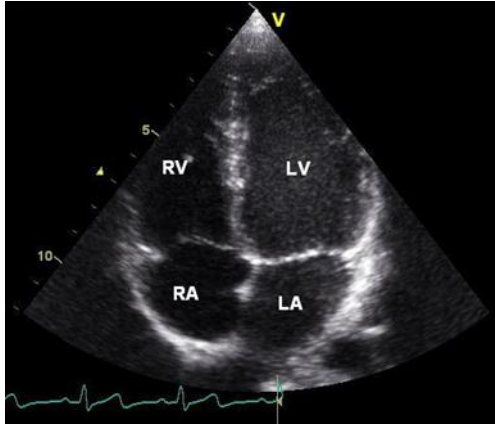
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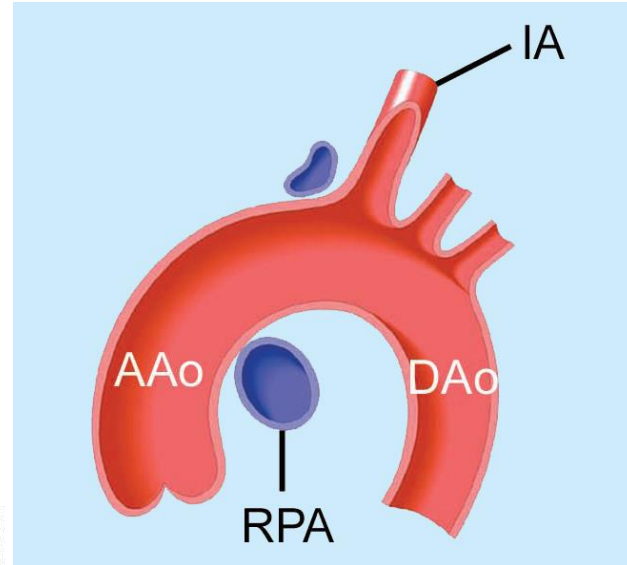
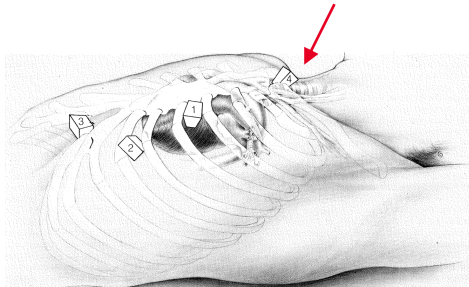
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Aortaboog



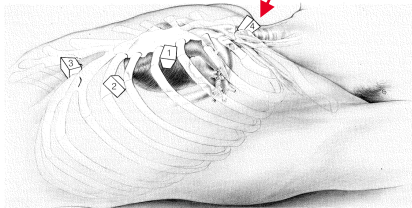
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Aortaboog



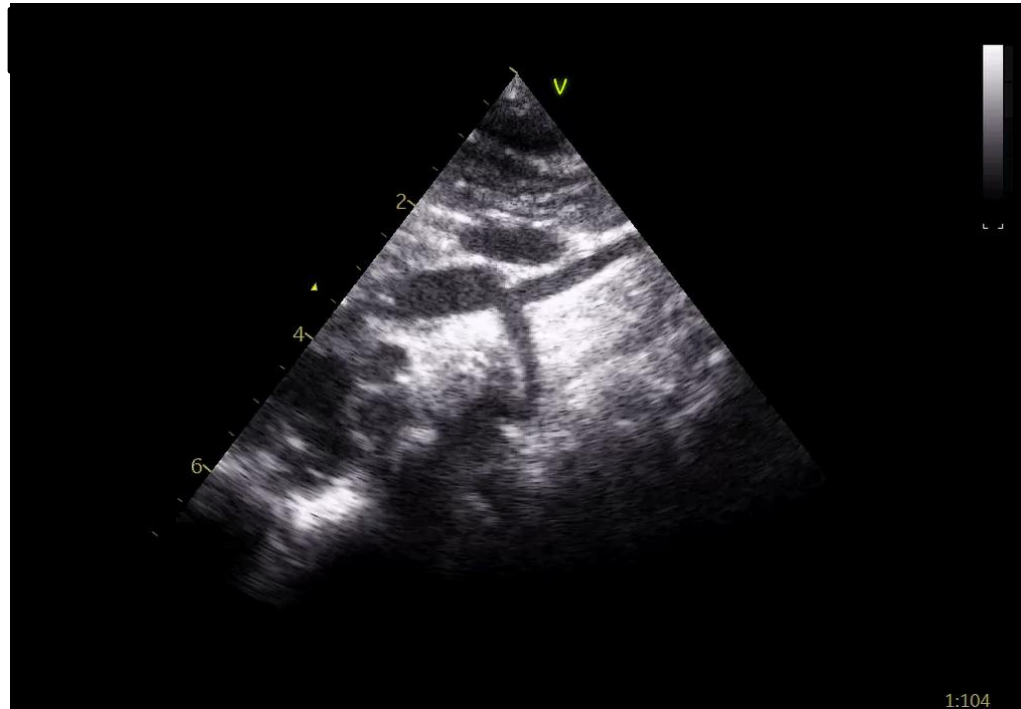
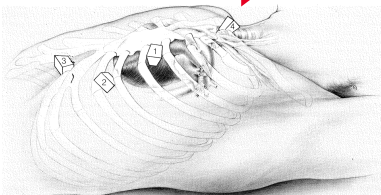
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Aortaboog



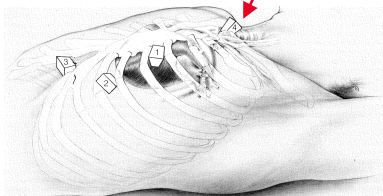
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Echo gericht op belangrijke shunts



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- Foramen open?
- Ductus open?

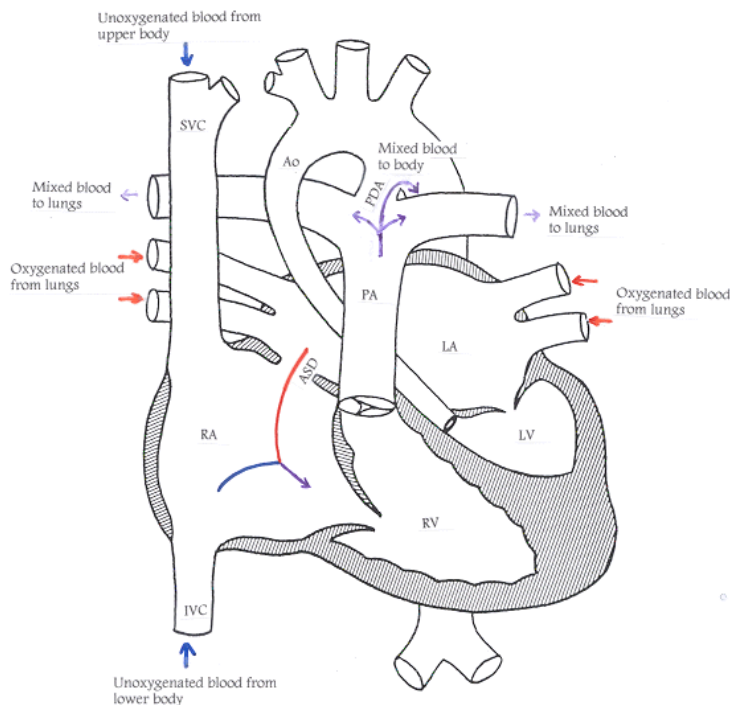
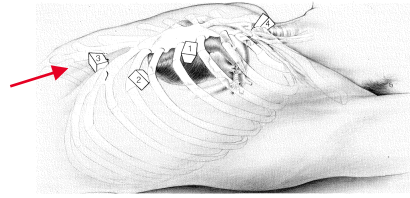
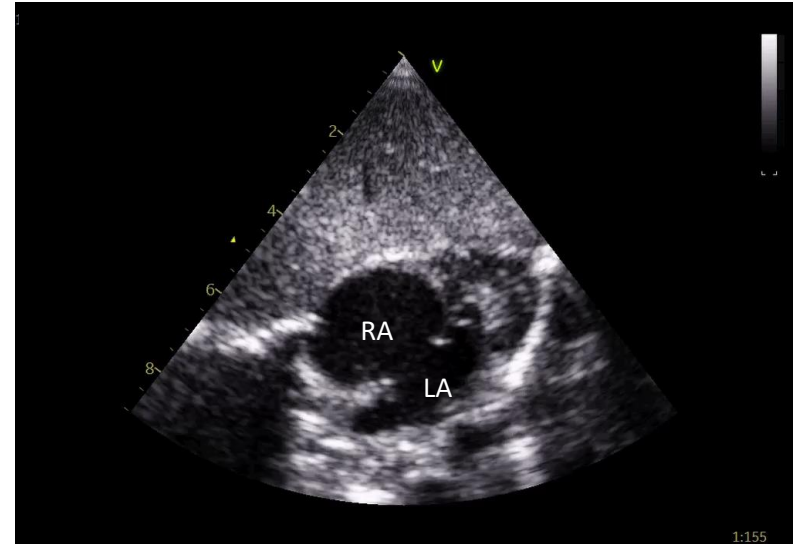
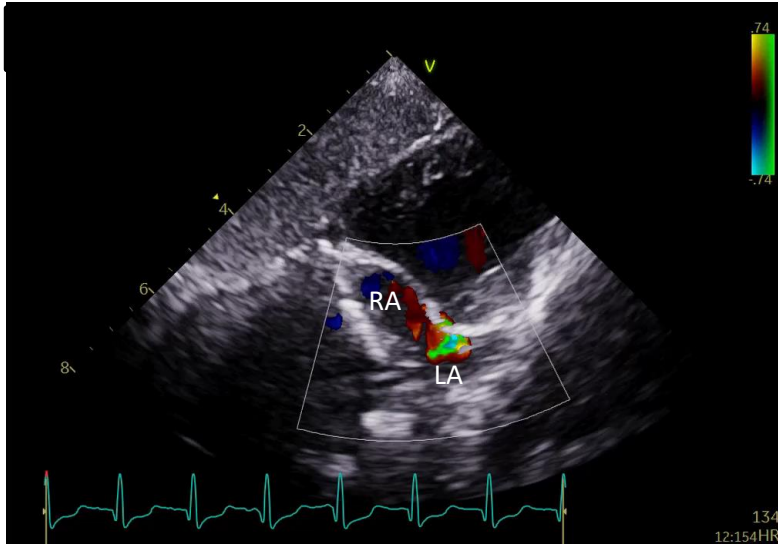


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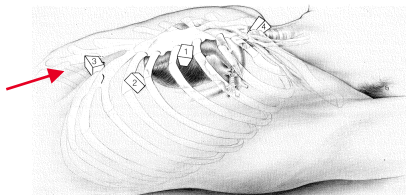
Foramen open?



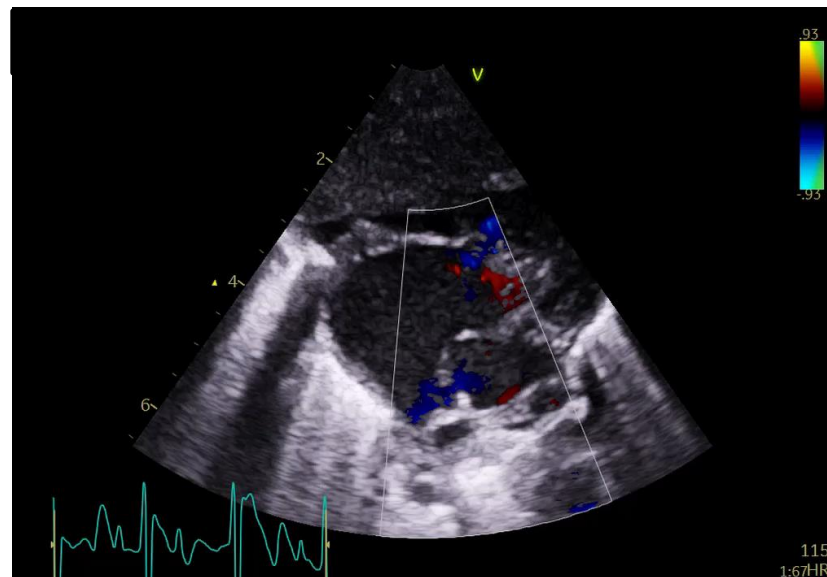
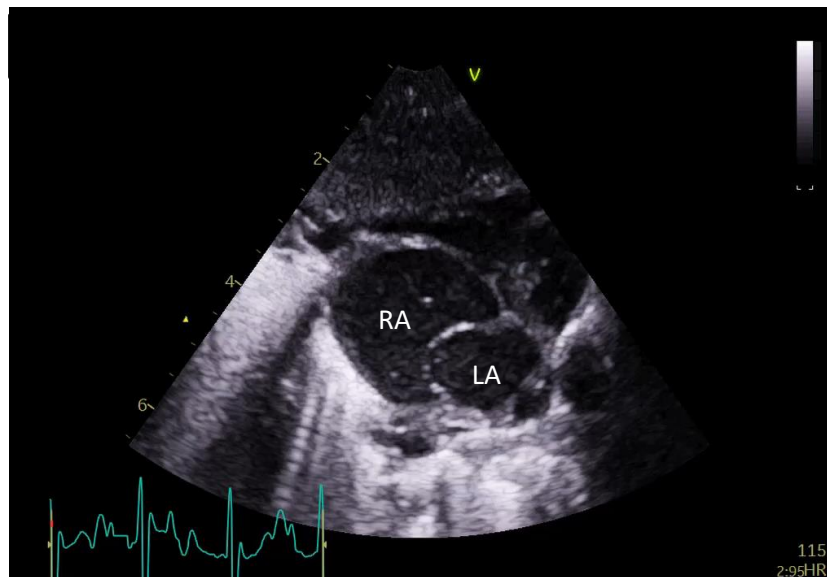
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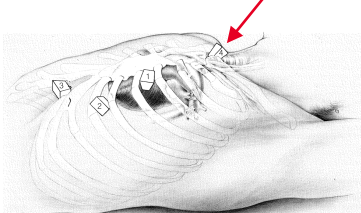
Foramen open?



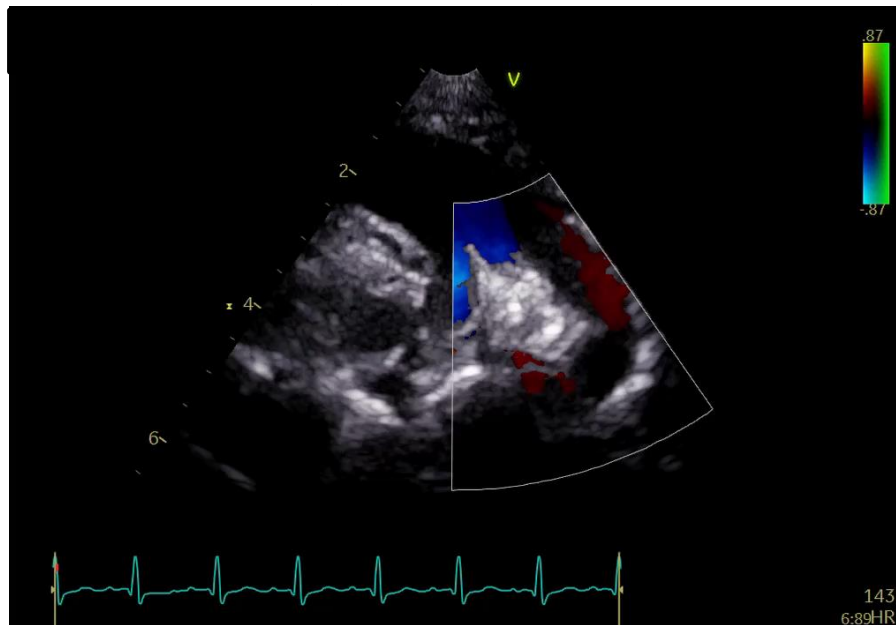
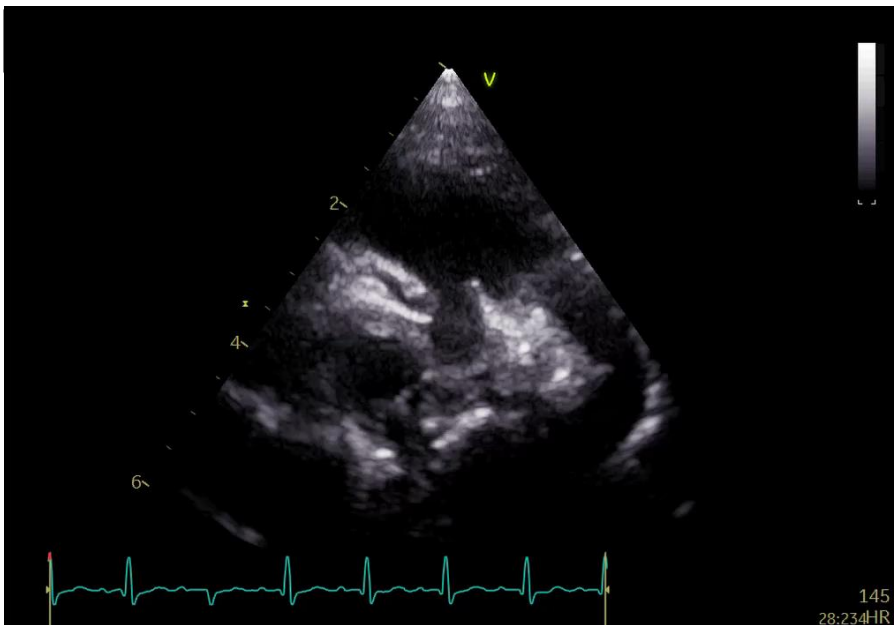
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Ductus open?



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Echo gericht op kenmerken belangrijk voor overleving



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- Rechter kamer (RV)
- Lekkage tricuspidalisklep (TV)
- Longaders

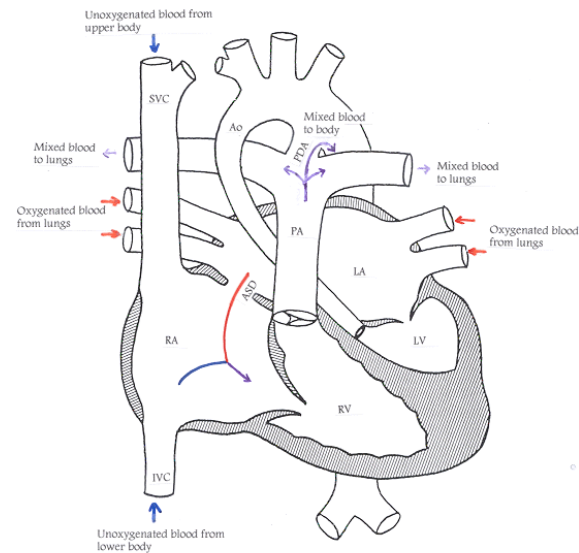
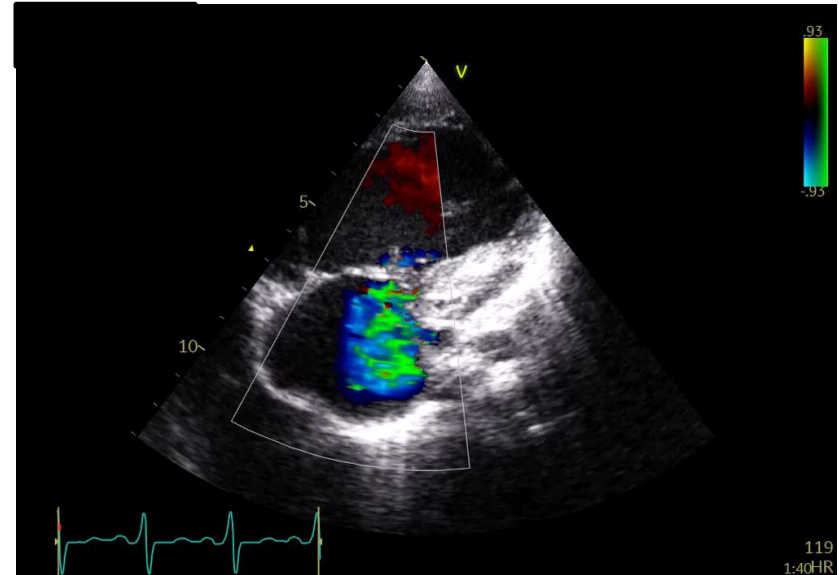
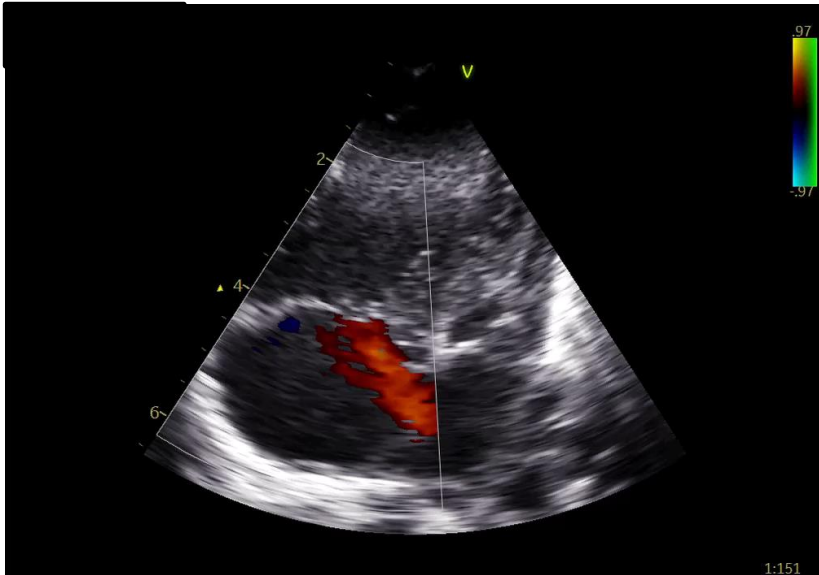
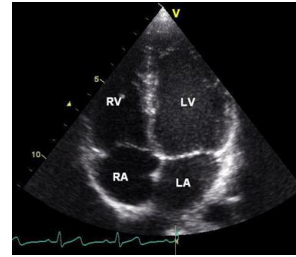


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Lekkage tricuspidalisklep



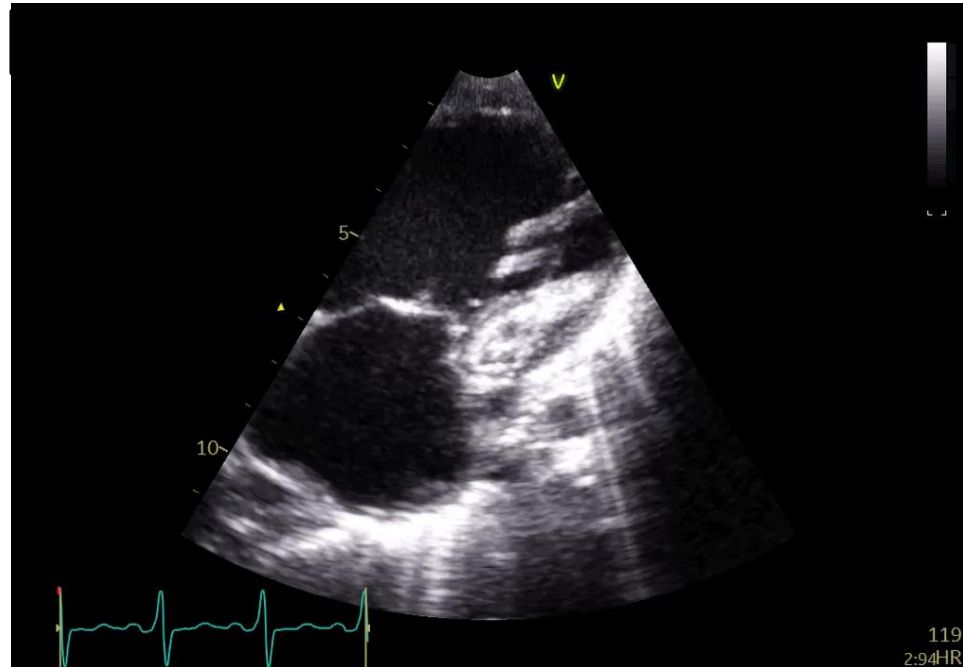
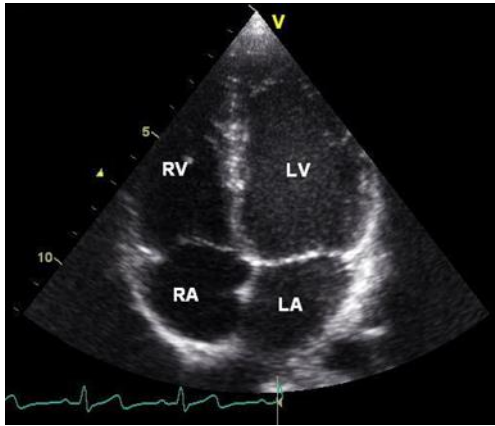
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Functie rechter hartkamer?



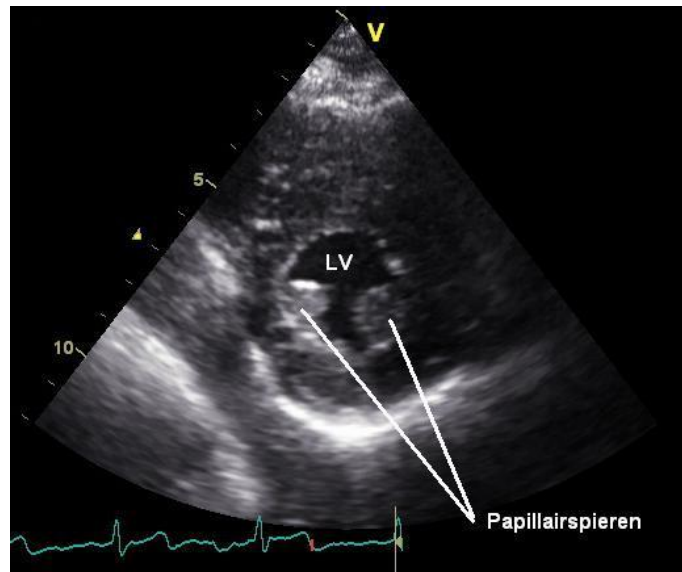
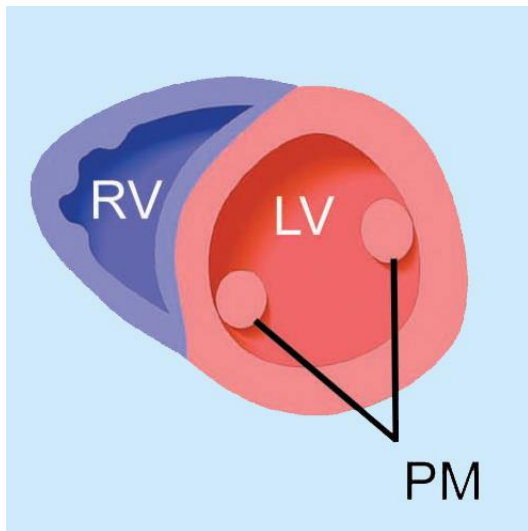
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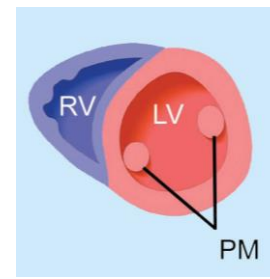
Dwarsdoorsnede kamers



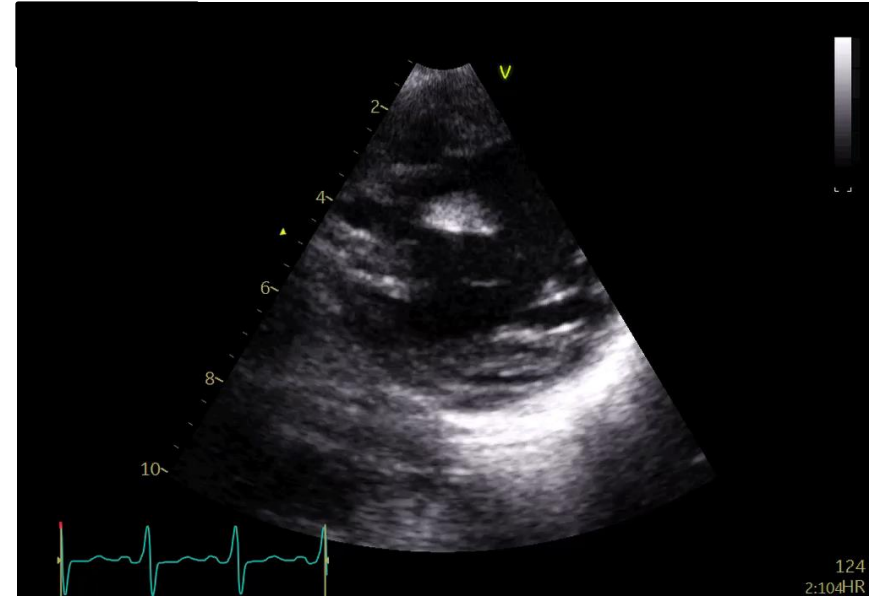
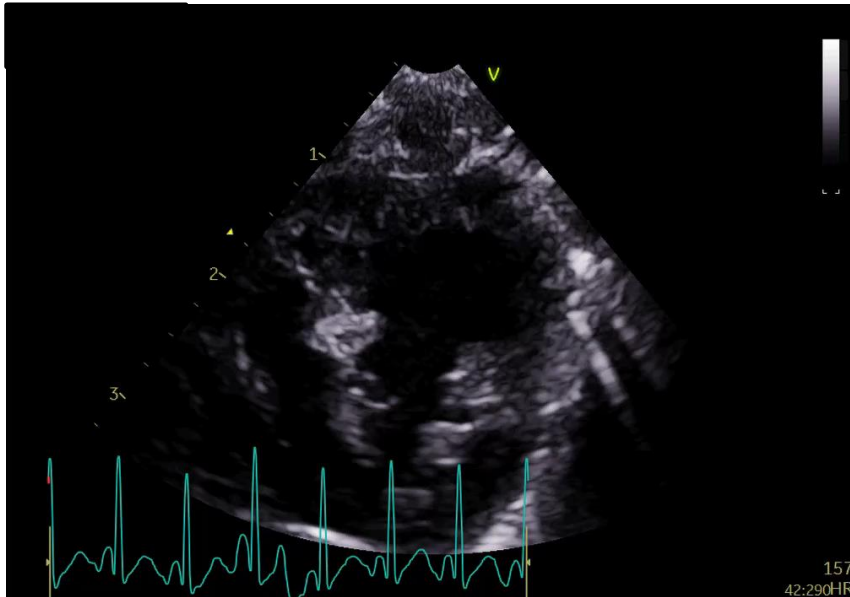
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Functie rechter kamer



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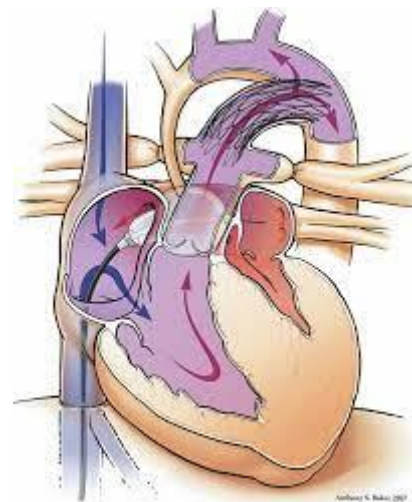


Na geboorte tot operatie



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- Diagnostiek: echocardiografie grote rol
- Behandelplan (hele team)
- Begeleiding ouders/gezin
- Soms nog een “tussen”operatie:
hybride Norwood
- Operaties



Bedankt voor jullie aandacht.

Zijn er nog vragen?



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