

Steps		YES/ NO		Weight of step (1-5)	Included in HOST-CHS Holistic Score
1	VSD Closure (Perimembraneous)				
1	Has the VSD been closed via either a transatrial or right ventriculotomy approach?	Y	N	4	KNOWLEDGE
	If ventriculotomy approach used: (if transatrial approach used score 'Y' for i + ii)				
2	i) Is the incision initially made a safe distance away from the aortic valve annulus (10-12mm) and then extended towards the annulus?	Y	N	4	RESPECT
3	ii) Is the incision clean? (i.e no jagged edges)	Y	N	2	RESPECT
4	Has the VSD patch been trimmed slightly larger than the size of the defect?	Y	N	3	KNOWLEDGE
5	Has the anastomosis commenced a safe distance from the conduction tissue on the ventricular septal crest?	Y	N	5	RESPECT
6	i) Does the suture continue along the lateral wall until the infundibular ridge?	Y	N	3	FLUENCY
7	ii) Is the other suture end taken away from the VSD edge to avoid the conduction tissue?	Y	N	4	KNOWLEDGE
8	iii) Does this suture continue to the TV annulus?	Y	N	3	FLUENCY
9	iv) Are mattress sutures used to close the VSD along the TV annulus?	Y	N	2	FLUENCY
10	Are there any visible holes within the VSD patch?	N	Y	4	RESPECT
11	Would the VSD patch bulge if pressurised?	Y	N	4	KNOWLEDGE
12	Has the tricuspid valve been damaged during repair?	N	Y	5	RESPECT
	Suture assessment:				
13	i) Are all the sutures evenly spaced from one another WITH a gap of 1-2mm between suture bites?	Y	N	3	FLUENCY
14	ii) Are all the sutures an adequate distance from the tissue edge (1-2mm)? (Except in region of conduction tissue)	Y	N	3	FLUENCY
2	Transection of aorta				
	Is the cut in the aorta				
15	i) Perpendicular to the vessel?	Y	N	3	RESPECT
16	ii) Clean? (i.e. no jagged edges)	Y	N	2	RESPECT
17	Is there enough distance on the proximal aorta (5-10mm) for good sized coronary buttons?	Y	N	4	KNOWLEDGE
18	Is there enough distal length on the aorta for reconstruction of the neo-aorta?	Y	N	3	KNOWLEDGE
3	Excision of coronary artery buttons				
19	Have the coronary buttons been excised with a liberal amount of aortic sinus wall with the coronary artery?	Y	N	4	RESPECT
20	Is the coronary button rectangular shaped?	Y	N	3	KNOWLEDGE
21	Is the coronary orifice in the centre of the button?	Y	N	4	KNOWLEDGE
22	Is there enough aortic wall left for pulmonary artery reconstruction? (i.e. oblique cut towards anterior commissure)	Y	N	4	KNOWLEDGE
23	Have one or more commissures been marked with a pen or stitch?	Y	N	3	KNOWLEDGE
4	Reconstruction of Neo-pulmonary trunk (can be also completed later in operation)				
24	Is the height of patch level with the native tissue left following transection/ coronary button excision?	Y	N	4	FLUENCY
25	Is diameter of patch slightly larger than the native lumen size?	Y	N	3	KNOWLEDGE
26	Has an end-to-end anastomosis been performed between the neo-pulmonary trunk and the distal pulmonary artery?	Y	N	3	
27	Was the anastomosis commenced posteriorly?	Y	N	2	
	Suture/Anastomosis assessment:				
28	i) Are all the sutures evenly spaced from one another WITH a gap of 2-3mm between suture bites?	Y	N	3	FLUENCY
29	ii) Are all the sutures an adequate distance from the tissue edge (2-3mm)?	Y	N	3	FLUENCY

5 Reconstruction of Aortic Arch					
30	Has an incision been made along the lesser curvature of the aortic arch?	Y	N	3	
31	i) Does the incision extend beyond the coarctation segment?	Y	N	4	KNOWLEDGE
32	Has an appropriate sized patch been made? (i.e. elongated oval shape)	Y	N	3	KNOWLEDGE
33	Has the patch anastomosis commenced at the apex of the incision?	Y	N	2	FLUENCY
34	i) Have both ends of the suture been continued proximally to transected end of the aorta?	Y	N	3	FLUENCY
35	Has the patched been trimmed to accommodate with size mismatch with the neo-aortic root?	Y	N	4	FLUENCY
36	Are there any visible holes or kinks within the reconstructed patch?	N	Y	5	RESPECT
Suture/Anastomosis assessment:					
37	i) Are all the sutures evenly spaced from one another WITH a gap of 2-3mm between suture bites?	Y	N	3	FLUENCY
38	ii) Are all the sutures an adequate distance from the tissue edge (2-3mm)?	Y	N	3	FLUENCY
6 Reconstruction of neo-aorta					
39	Has the length of the ascending aorta been adjusted in a new position if required? (i.e. trimmed)	Y	N	4	KNOWLEDGE
40	Has an end-to-end anastomosis been performed between the proximal neo-aorta and ascending aorta?	Y	N	3	
41	Was the anastomosis commenced posteriorly?	Y	N	3	FLUENCY
Suture/Anastomosis assessment:					
42	i) Are all the sutures evenly spaced from one another WITH a gap of 2-3mm between suture bites?	Y	N	3	FLUENCY
43	ii) Are all the sutures an adequate distance from the tissue edge (2-3mm)?	Y	N	3	FLUENCY
7 Implantation of coronary artery buttons to neo-aorta					
Are the coronary button incisions					
44	i) In the correct position for the technique of choice? (i.e. medially-based trap door for closed technique vs trap-door/rectangular for open technique)	Y	N	5	KNOWLEDGE
45	ii) Adequate sized incision for technique of choice? (i.e. Closed technique: incision is slightly smaller than button [4-6mm] and edges of trap door are cut at right angles)	Y	N	5	RESPECT
Are both coronary arteries:					
46	i) In the 'best lie' position? (i.e. lateral + superior avoiding compression from PA, not stretching)	Y	N	5	FLUENCY
47	ii) Kinked or twisted?	N	Y	5	RESPECT
iii) Suture/Anastomosis assessment:					
48	a) Are all the sutures evenly spaced from one another WITH a gap of 1-2mm between suture bites?	Y	N	3	FLUENCY
49	b) Are all sutures an adequate distance from the tissue edge (1-2mm) AND is a safe distance from the neo-aortic valve and coronary ostium?	Y	N	3	FLUENCY
50	iv) Have both coronary button been trimmed appropriately? (i.e. leaving more tissue medially than laterally in the trap door technique/ not too much tissue left over effecting lay/anastomosis)	Y	N	3	
51	v) Are both coronaries still in tact by the end of anastomosis (i.e. not avulsed)?	Y	N	5	RESPECT
TOTAL SCORE					177