

Transannular patch

Steps		YES/NO		Weight of step (1-5)	Included in HOST-CHS Holistic Score
1	Pulmonary valve and artery management				
1	Have placement sutures been placed on the MPA and at the pulmonary annulus for exposure?	Y	N	2	KNOWLEDGE
2	Has an incision been made in the main pulmonary artery? (Pulmonary arteriotomy)	Y	N	3	
3	i) Is the incision made a safe distance (~2-4mm) above the sinotubular junction? (i.e. avoiding damage to pulmonary valve)	Y	N	5	RESPECT
4	ii) Is the incision extended distally into one or both branch pulmonary arteries?	Y	N	4	FLUENCY
5	iii) Is the incision extended proximally into the pulmonary sinuses and across the pulmonary annulus?	Y	N	4	FLUENCY
6	Does the incision continue into the right ventricular outflow tract?	Y	N	3	FLUENCY
7	i) Is this incision aligned with the RVOT?	Y	N	4	KNOWLEDGE
8	ii) Are all incisions clean? (i.e. not jagged or having sharp protruding points)	Y	N	3	RESPECT
2	Relief of right ventricular outflow tract obstruction				
9	Have the hypertrophic muscle bundles and fibroelastic tissue in the RVOT been resected?	Y	N	4	KNOWLEDGE
10	Has the candidate resected more through the incision in pulmonary trunk?	Y	N	2	KNOWLEDGE
11	Has the tricuspid valve or the pulmonary valve been damaged?	N	Y	5	RESPECT
3	Transatrial closure of ventricular septal defect				
12	Is the patch a generous size that it would accommodate the overriding aorta? (compare with example in training video)	Y	N	4	KNOWLEDGE
13	Has the suture been commenced at deepest part of the VSD along the interventricular crest?	Y	N	3	FLUENCY
14	i) Does the suture end continue up towards the aorta and around to the tricuspid annulus?	Y	N	3	FLUENCY
15	Is the other end continued towards the tricuspid annulus?	Y	N	3	FLUENCY
16	i) Are the sutures placed away from the conduction tissue (to the right) avoiding damage?	Y	N	5	RESPECT
17	Have mattress sutures been placed from the right atrium to suture the remaining patch?	Y	N	3	
18	Has the tricuspid valve or conduction been compromised or damaged?	N	Y	5	RESPECT
19	Have any of the sutures been caught in the tricuspid valve chords?	N	Y	5	RESPECT
	Suture assessment:				
20	i) Are all the sutures evenly spaced from one another WITH a gap of 2-3mm between suture bites?	Y	N	3	FLUENCY
21	ii) Are all the sutures an adequate distance from the tissue edge (2-3mm)? (except at the conduction)	Y	N	3	FLUENCY
	Patch assessment				
22	i) Are there any visible holes within the patch?	N	Y	4	RESPECT
23	ii) Does the patch appear the correct size for size of the defect? (i.e. not too large or small?)	Y	N	4	KNOWLEDGE
4	Augmentation of pulmonary trunk with transannular patch				
24	Has the patch been shaped as an oval shape to accommodate the defect?	Y	N	4	KNOWLEDGE
25	Is the suture commenced at the distal MPA/LPA and continued around the toe and proximally along the incision?	Y	N	4	FLUENCY
26	Has the patch been measured and trimmed to accommodate the length of the defect before the suture is completed?	Y	N	4	KNOWLEDGE
27	Has the other suture end been continued to complete the anastomosis?	Y	N	3	FLUENCY

HOST-CHS Assessment tool – Transatrial repair of Tetralogy of Fallot with Transannular patch

	Suture 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)? (except at the conduction)	Y	N	3	FLUENCY
5	Transannular patch assessment				
30	Is the patch the correct shape for the defect? (i.e. likely to bulge if pressurised)	Y	N	5	KNOWLEDGE
31	Are there any visible holes on the patch?	N	Y	4	RESPECT
32	Have any plication sutures been used to narrow the patch?	N	Y	4	FLUENCY
TOTAL SCORE				118	