Clinical Guideline

TGA (previous arterial switch)

SETTING South West England and South Wales

GUIDELINE FOR Cardiology teams in South West England and South Wales hospitals

PATIENT GROUP Adult patients with congenital heart disease

GUIDANCE

Follow-up: annual, biennial if good repair with no residual lesions

Associated lesions: (sub) pulmonary stenosis, VSD, LVOTO and coarctation

Inheritance: rare

Long-term complications:
RVOTO and supra pulmonary stenosis (40%)
PR
neo-aortic root dilatation
neo-aortic regurgitation (9%)
LV dysfunction
coronary artery issues (8%)
arrhythmias (much less common than with Mustard/Senning)
functional aortic arch obstruction and hypertension (due to acute angle of aortic arch)

1-2 yearly:

History:
sustained palpitations
presyncope?
exertional dyspnoea
chest pain (may have silent ischaemia)

Exam:
systolic murmur of RVOTO
diastolic murmur of neo AR/PR

ECG:
should be normal
ischemic ECG changes if coronary issues
RVH if RVOTO

Echo:
findings may be minimal
assess PV/MPA
measure neo aortic root and proximal ascending aorta
neo AR
PH (NB care with using TR for this as there may be RVOTO)
VSD
LV size and function (global and regional)

Drugs: nil routine

Further investigations:

CXR: not routine
narrow mediastinal shadow

CPET: at baseline and if change in symptoms, to assess ischaemic ECG changes and functional capacity

Holter: if clinically indicated

TOE: to assess neoaortic valve if repair considered

Catheter: to assess haemodynamics (assessment of PAH, branch PA stenosis). Consider coronary angio if LV dysfunction and suspicion of myocardial ischaemia

MRI: at baseline to assess volumes, great arteries (CT or catheter if pacemaker) and if imaging of RVOT and pulmonary arteries is required (including split PA flows), including in pre-op planning

CT coronaries: at baseline to image coronary ostia and if chest pain

Stress testing (echo/MRI): if anatomical coronary lesions to look for ischaemia

Pregnancy: risk depends on haemodynamic lesions and presence of neoaortic root dilatation

Contraception: any in most patients

Endocarditis: antibiotic prophylaxis before high-risk dental work if prosthetic valve, previous endocarditis, residual defects at the site of or adjacent to the site of prosthetic material

Discuss if:

- RVOTO (pullback gradient at cath > 50 mmHg or RV/LV pressure ratio > 0.7)
- Branch PA stenosis (>50% diameter narrowing +RVSP >50mmHg +/- reduced lung perfusion)
- Myocardial ischemia from coronary artery obstruction
- Severe neo-aortic valve regurgitation
- Progressive or severe neoaortic root dilatation (>55mm)
- Severe pulmonary regurgitation is present and there is significant RV dilatation or RV dysfunction

Appendix 1 – Evidence of Learning from Incidents

The following table sets out any incidents/ cases which informed either the creation of this document or from which changes to the existing version have been made.

Incidents	Summary of Learning
n/a	

Table A

REFERENCES	• Baumgartner H et al. 2020 ESC Guidelines for the management of adult congenital heart disease. Eur Heart J. 2020 00, 1-83. • Stout et al. 2018 AHA/ACC Guideline for the Management of Adults With Congenital Heart Disease. Journal of the American College of Cardiology Aug 2018, 735-1097. • Canadian Adult Congenital Heart Network (www.cachnet.org)
RELATED DOCUMENTS AND PAGES	Regional Referral Guidance for Adult Patients with Congenital Heart Disease RegionalReferralGuidanceAdultPatientsWithCongenita-3.pdf Regional Referral Pathway for Cardiac Disease in Pregnancy ClinicalGuidelineForCardiacDiseasePreExistingOrPre-1.pdf
AUTHORISING BODY	Cardiac Executive Group, Bristol Heart Institute
SAFETY	None
QUERIES AND CONTACT	**Bristol:** Contact any of the following via UHBW switchboard – 0117 923 0000 Dr S Curtis Dr G Szantho Dr M Turner Dr R Bedair ACHD Specialist Nurse Team 0117 342 6599 **Cardiff:** via UHWales switchboard - 029 2074 7747 Dr S MacDonald Dr H Wallis Dr DG Wilson Dr N Masani ACHD Specialist Nurse Team 02920 744 580
AUDIT REQUIREMENTS	Adherence to guideline will be audited periodically as part of ACHD departmental audit

Plan Elements	**Plan Details**
The Dissemination Lead is:	Dr Stephanie Curtis
Is this document: A – replacing the same titled, expired SOP, B – replacing an alternative SOP, C – a new SOP:	A
If answer above is B: Alternative documentation this SOP will replace (if applicable):	
This document is to be disseminated to:	South West and South Wales Congenital Heart Network
Method of dissemination:	Email
Is Training required:	No

Document Change Control

Date of Version	Version Number	Lead for Revisions	Type of Revision	Description of Revision
Dec 2020	2	Consultant Cardiologist	Minor	Updated contacts and related documents. Follow up - biennial if good repair with no residual lesions added