

Clinical Guideline

# TGA (PREVIOUS RASTELLI PROCEDURE)

<b>SETTING</b>	South West England and South Wales
<b>GUIDELINE FOR</b>	Cardiology teams in South West England and South Wales hospitals
<b>PATIENT GROUP</b>	Adult patients with congenital heart disease

## GUIDANCE

<b>Follow-up:</b>	annual
<b>Associated lesions:</b>	(sub) pulmonary stenosis, VSD, LVOTO and coarctation
<b>Inheritance:</b>	rare
<b>Long-term complications:</b>	pulmonary conduit obstruction (or regurgitation) RV failure TR LVOT obstruction from the intraventricular baffle arrhythmias (atrial and ventricular) residual VSD aortic root dilatation, and aortic regurgitation LV dysfunction endocarditis of RV-PA conduit
<b>Annually:</b>	
<b>History:</b>	dyspnea fatigue and reduced exercise capacity palpitations
<b>Exam:</b>	if conduit obstruction A wave in JVP RV heave ejection systolic murmur in pulmonary area soft P2
<b>ECG:</b>	often RBBB may have RVH and conduction disease over time
<b>Echo:</b>	RV size and function, including strain RV-to-PA conduit stenosis/regurgitation (anterior, may be difficult to image) – including Doppler interrogation subaortic stenosis aortic regurgitation LV function tricuspid regurgitation (RV systolic pressure from the tricuspid)

regurgitation jet)  
residual or baffle-margin VSD

### Further investigations:

<b>CXR:</b>	not routine narrow mediastinal shadow features of conduit replacement
<b>CPET:</b>	at baseline or if change in symptoms, to assess functional capacity
<b>Holter:</b>	if clinically indicated
<b>TOE:</b>	if needed to assess LVOTO
<b>Catheter:</b>	to determine severity of conduit stenosis/regurgitation, status of distal pulmonary arteries if not able to be imaged, coronary artery delineation before any intervention, assessment of PAH/vasodilator testing assessment of subaortic obstruction
<b>EP study:</b>	for refractory atrial arrhythmias
<b>MRI:</b>	at baseline and every 3-5 years, to assess volumes, function, conduit stenosis/regurgitation, and to visualise branch PAs (CT or catheter if pacemaker)
<b>Pregnancy:</b>	low risk unless impaired LV function or severe LVOT obstruction
<b>Contraception:</b>	no limitations
<b>Endocarditis:</b>	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:

- Significant RV- PA conduit stenosis (peak gradient > 50 mmHg or RV pressure >70% systemic), decreasing RV function, symptoms or declining exercise tolerance
- Severe conduit regurgitation with significant RV enlargement
- Branch PA stenosis
- Severe AR and increasing LV size or symptoms
- Subaortic (baffle) obstruction (mean gradient > 50 mm Hg, less if LVH).
- Development/progression of atrial or ventricular arrhythmias
- Residual VSD with Qp/Qs > 1.5:1

## 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
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n/a

**Table A**

<b>REFERENCES</b>	<ul style="list-style-type: none"> <li>Baumgartner H et al. 2020 ESC Guidelines for the management of adult congenital heart disease. Eur Heart J. 2020 00, 1-83.</li> <li>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.</li> <li>Canadian Adult Congenital Heart Network (<a href="http://www.cachnet.org">www.cachnet.org</a>)</li> </ul>
<b>RELATED DOCUMENTS AND PAGES</b>	<p>Regional Referral Guidance for Adult Patients with Congenital Heart Disease <a href="#">RegionalReferralGuidanceAdultPatientsWithCongenita-3.pdf</a></p> <p>Regional Referral Pathway for Cardiac Disease in Pregnancy <a href="#">ClinicalGuidelineForCardiacDiseasePreExistingOrPre-1.pdf</a></p>
<b>AUTHORISING BODY</b>	Cardiac Executive Group, Bristol Heart Institute
<b>SAFETY</b>	None
<b>QUERIES AND CONTACT</b>	<p><b>Bristol:</b> 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</p> <p><b>Cardiff:</b> 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</p>
<b>AUDIT REQUIREMENTS</b>	Adherence to guideline will be audited periodically as part of ACHD departmental audit

Plan Elements	Plan Details
<b>The Dissemination Lead is:</b>	Dr Stephanie Curtis
<b>Is this document: A – replacing the same titled, expired SOP, B – replacing an alternative SOP, C – a new SOP:</b>	A
<b>If answer above is B: Alternative documentation this SOP will replace (if applicable):</b>	
<b>This document is to be disseminated to:</b>	South West and South Wales Congenital Heart Network
<b>Method of dissemination:</b>	Email

<b>Is Training required:</b>	No
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<b>Document Change Control</b>				
<b>Date of Version</b>	<b>Version Number</b>	<b>Lead for Revisions</b>	<b>Type of Revision</b>	<b>Description of Revision</b>
Nov 2020	2	Consultant Cardiologist	Minor	Updated contacts and related documents only