Valvular heart disease

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Condition

Valvular heart disease encompasses a wide range of structural and/or functional heart valve defects. This includes, amongst others:

Aortic stenosis

Aortic regurgitation

Mitral stenosis

Mitral regurgitation

Tricuspid stenosis

Tricuspid regurgitation

Pulmonary stenosis

Pulmonary regurgitation

Mitral valve prolapse

Ebstein anomaly

Individual at Risk

Donor

Guidance at RECRUITMENT/CT/WORK-UP

Acceptable

The following conditions may be acceptable if no ongoing medical care is required, including any medications, and there are no restrictions of activities of daily living:

Mitral valve prolapse in the absence of haemodynamically significant mitral regurgitation and QTc prolongation (obtain pre-operative anaesthetic review if bone marrow collection required)

Minor valve defects (such as mild tricuspid regurgitation) and innocent murmurs

Bicuspid aortic valve without significant stenosis

Unacceptable

Any valve replacement or balloon valvuloplasty

Any clinically significant valvular disease (either by symptoms or echocardiography)

Any congenital valvular stenosis other than biscuspid aortic valve.

Any other valve defect requiring ongoing clinical care or medication, or which causes any restriction in activities of daily living.

Clinical justification

Whilst many valve defects may be asymptomatic in the otherwise healthy donor, the process of bone marrow donation or mobilised stem cell collection may expose such a donor to increased risk of adverse events. These include the arrhythmogenic and vasoactive effect of general anaesthetic and apheresis, risk of bacterial seeding through venous access and risk of thrombosis with G-CSF administration.

The use of prophylactic antibiotics in valve defects is variable and does not have a rigourous evidence base: therefore this should not be used to decide whether or not to accept a donor.

References

Despotis, G.J., Goodnough, L.T., Dynis, M., Baorto, D. & Spitznagel, E.L. (1998) Adverse events in platelet apheresis donors: a multivariate analysis in a hospital-based program. Vox Sanguinis, 77, 24–32

Mittnacht