Guidelines for the routine cardiac assessment of newborns with Down syndrome

Congenital heart disease is found in 40 - 50% of patients with Down syndrome. Some cases of severe congenital heart disease in this group may remain occult in the first months of life because of a delay in the fall of pulmonary vascular resistance. Late diagnosis may then result in an increased risk from surgical repair, or even inoperability.

The Paediatric and Congenital Council therefore recommends that all infants with Down syndrome be seen before two months of age by a physician with experience in the examination of the cardiovascular system of the newborn. This assessment should include echocardiography in all cases.

The echocardiogram should be performed by a paediatric cardiologist or paediatric sonographer (under the guidance of a paediatric cardiologist) as per the Standards of Practice for Paediatric Echocardiography (CSANZ/ASUM)*.

In selected well infants, if their family / home is isolated and access to a paediatric cardiologist is impractical, a screening ECG and echocardiogram by a non-paediatric cardiologist / sonographer, could be followed by formal review as above.

In the unwell neonate with Down syndrome early discussion with a paediatric cardiologist or neonatal specialist is recommended.