

AMA Criteria for Permanent Impairment Associated with Congenital Heart Disease

Overview: Congenital heart disease can cause impairment which can be quantitated using the AMA criteria.

Selection: A patient should have evidence of congenital heart disease based on physical examination laboratory studies or other findings.

Parameters:

- (1) functional class (using the 1964 NYHA criteria)
- (2) therapy (diet medication surgery) and its effectiveness
- (3) evidence of cardiac chamber dysfunction and dilatation
- (4) valvular stenosis and/or regurgitation severity
- (5) pulmonary vascular resistance
- (6) right to left shunt
- (7) left to right shunt

Functional Class	Therapy	Cardiac Chamber Dysfunction and Dilatation	Valvular Stenosis and/or Regurgitation	Impairment of the Whole Person
no symptoms with moderately heavy physical exertion (class I)	continuous therapy not required; may be intermittent	no signs (? mild)	mild	0 - 9%
symptoms with moderately heavy physical exertion (class II)	moderate adjustments in diet and drugs to remain free of signs and symptoms	moderate signs	moderate	10 – 29%
symptoms during ordinary activities (class III)	despite dietary and medical therapy	moderate to severe	moderate or severe	30 – 49%
CHF with less than ordinary daily activities (class IV)	poorly responsive to therapy	moderate to severe	severe	50 – 100%

Pulmonary Vascular Resistance	Right to Left Shunt	Left to Right Shunt	Impairment of the Whole Person
none or mild elevation	none	small; pulmonary flow less than 1.5 times systemic flow	0 - 9%
moderate elevation; less than 0.5 times systemic vascular resistance	none	moderate; pulmonary flow ≥ 1.5 and < 2.0 times systemic flow	10 – 29%
≥ 0.5 times systemic vascular resistance	present	pulmonary flow ≥ 2.0 times systemic flow	30 – 49%
≥ 0.5 times systemic vascular resistance	present	pulmonary flow ≥ 2.0 times systemic flow	50 – 100%

where:

- Pulmonary to systemic blood flow in the shunt is referred to as Q_p / Q_s .
- Class 3 and 4 congenital heart disease overlap in most of the measures except functional class and responsiveness to therapy.

References:

Cocchiarella L Andersson GBJ (editors). Guides to the Evaluation of Permanent Impairment Fifth Edition. American Medical Association. 2001. (Table 3-8 page 42; for functional class see Table 3-1 page 26).