



الأستاذ الدكتور مصطفى كمال بدر الدين  
أستاذ طب الأطفال و أمراض قلب الأطفال  
جامعة الإسكندرية

# Congenital Heart Disease

## The Spectrum

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### Pathologic Spectrum

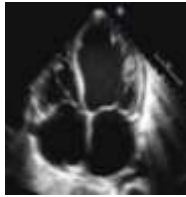
**Structural  
intra-cardiac  
defects**



**Structural  
vascular  
defects**



**Mechanical  
(Functional)  
defects**



**Conduction  
defects**



**Cardiac  
tumors**



### Age Spectrum

**Fetal**

**Neonatal**

**Childhood**

**Adulthood**

**Index  
of  
suspicion**

High risk fetus  
Fetal echo screening

High risk newborn  
O2 screening  
Clinical signs

Cardiac murmur  
Cardiac symptoms

Complications

### Age Spectrum

Spectrum of care	Fetal	Neonatal	Childhood	Adulthood
Fetologist	Yellow			
Neonatologist		Yellow		
Pediatric Cardiologist			Yellow	
Interventionist		Yellow	Yellow	
Pediatric Intensivist		Yellow	Yellow	
Electrophysiologist		Yellow	Yellow	
Adult CHD Cardiologist				Yellow
Cardiac Radiologist		Yellow	Yellow	Yellow
Cardiac Surgeon		Yellow	Yellow	

### Clinical Spectrum

	Benign	Mild	Moderate	Severe	Critical
Symptoms	No	No	Childhood	Neonatal	Neonatal Serious
Complications	None	Possible	Possible	Serious	Serious
Risks	Anecdotal	Uncommon	Common	Common	Always Early Death

## Clinical Spectrum

Intervention	Benign	Mild	Moderate	Severe	Critical
None – Only follow up					
Prophylaxis BE					
Medication					Palliative
Catheter Intervention			Childhood	Childhood	Neonatal
Surgery			Late	Early	Urgent

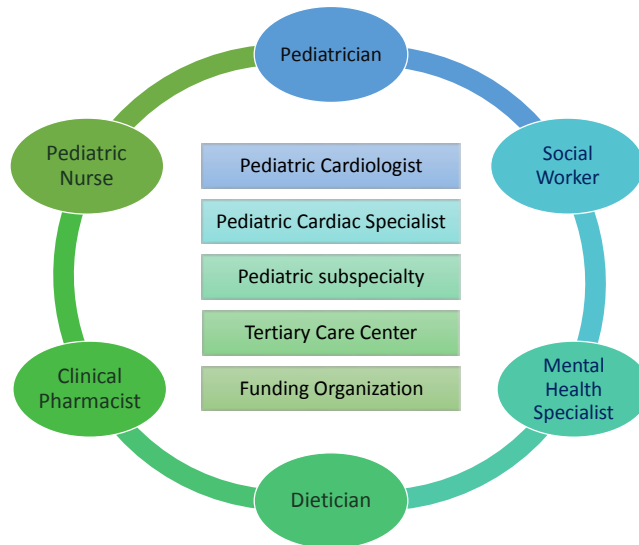
## Quality of Life

Normal QOL	Not Normal QOL
Mild Lesion	More than Mild Lesion
More than Mild Lesion	Mild Lesion
<b>Tolerance</b>	<b>Nocebo effect</b>


### Natural Course Spectrum

Stable	Surgical Candidate	Inoperable	Operated
Benign / Mild Antibiotic prophylaxis Medications Interventions Long term follow up	Moderate / severe Require surgery	Severe Pulmonary hypertension	Moderate / severe Medications Long term follow up

### Spectrum of Care



# Congenital Heart Disease



The Spectrum is wide  
and multi-faceted

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