

Table (1): Distribution of vital parameters of the studied neonates before and after phototherapy

Vital parameters (n=110)	Before	After	P value
	Phototherapy	Phototherapy	
	Mean±SD	Mean±SD	
Heart rate (Beats/min)	133.435±5.44	137.55±6.83	0.000**
Respiratory rate (cycles/min)	44.13±4.73	46.11±4.87	0.000**
SpO2 (%)	98.67±0.84	97.29±0.94	0.000**
Systolic Blood pressure (mmHg)	66.71±3.82	64.92±4.82	0.000**
Diastolic Blood pressure (mmHg)	38.30±3.32	38.42±4.49	0.548

** highly significant

Table (2): Assessment of the left ventricular systolic function by M-mode echocardiography before and after phototherapy

Systolic Parameter of LV (n=110)	Before	After	P value
	Phototherapy	Phototherapy	
	Mean±SD	Mean±SD	
LVIVSd	4.69±0.78	4.74±0.64	0.488
LVIVSs	5.56±0.79	5.60±0.62	0.419
LVIDd	13.22±1.21	13.23±1.04	0.903
LVIDs	8.01±0.89	8.12±0.77	0.128
LVPWd	4.48±0.85	4.59±0.65	0.071
LVPWs	4.95±0.65	4.90±0.73	0.604
EF	65.95±4.43	66.06±6.6	0.629
FS	33.81±2.28	33.61±2.32	0.237
Left Atrium	9.34±1.15	9.40±1.26	0.336
Aorta	7.85±0.96	7.92±0.88	0.459
LA/Ao	1.20±0.19	1.19±0.18	0.640

LVIVSd= Left ventricular interventricular septum in diastole; LVIVSs= left ventricular interventricular septum in systole; LVIDd= left ventricular internal dimension in diastole; LVIDs= left ventricular internal dimension in systole; LVPWd= left ventricular posterior wall in diastole; LVPWs= left ventricular posterior wall in systole; EF=ejection fraction; FS=fraction shortening ; LA=Left atrium; Ao=Aorta

Table (3): Assessment of diastolic function of LV (Mitral Valve)

Diastolic Parameter of LV (n=110)	Before Phototherapy Mean±SD	After Phototherapy Mean±SD	P value
E wave	44.34±8.08	44.57±8.19	0.675
A wave	56.73±9.77	57.01±11.35	0.723
E/A	0.79±0.18	0.81±0.23	0.406

E=Early diastolic velocity; A=Late diastole with atrial contraction

Table (4): Assessment of myocardial velocity and time interval at mitral valve by tissue Doppler imaging

Tissue Doppler Imaging (TDI) parameter of LV (n=110)	Before Phototherapy Mean±SD	After Phototherapy Mean±SD	P value
E' wave	5.70±0.95	5.78±0.95	0.238
A' wave	7.45±1.30	7.49±1.15	0.464
S' wave	5.79±0.76	5.71±0.99	0.215
IVCT	26.31±5.89	26.72±5.35	0.465
IVRT	24.89±3.98	24.45±4.07	0.367
ET	219.91±34.85	218.53±32.01	0.221
Tei Index	0.23±0.04	0.22±0.05	0.961

E'=Early diastolic velocity; A'=Late diastolic velocity S'=Systolic velocity; IVCT= Isovolumetric contraction time; IVRT=Isovolumetric relaxation time ; ET=Ejection time