

Incidence of Pediatric Acute Congestive Heart Failure in Children Hospital Cairo University

Thesis

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Abstract

Cross sectional descriptive study was conducted on cases of acute congestive heart failure (ACHF) admitted to Abu El Reesh Hospital Cairo University during a period of 6 months, Congenital cardiac abnormalities were the most common (79.5%) followed by cardiomyopathies (11%) and rheumatic heart disease (9.25%), Females represented 55.6% of cases, Doses of anti-failure medications were significantly higher in cases of cardiomyopathy than the other 2 groups, Giza government had the highest percentage of cases (24%), March had the highest incidence of admitted cases of AHF (20%).

Key Words: Acute congestive heart failure –Congenital heart disease – Cardiomyopathy- Rheumatic heart disease.

Dedication

To my great mother Salwa;

Who helped and sacrificed to me in every step of my life

To my wonderful father Dr. Hassan;

Who gave everything and took nothing.

To my beautiful mother Fefe;

For her great help and continuous support

To my husband Tarek;

Who gave me unlimited help, support and love

To my brothers Wassem & Mohammed;

Who encouraged me alot

To my lovely sisters; (Manal, Rehab, Rasha, Nada and Abeer);

Who supported and helped me a lot

To my sweet heart Sama & Mohammed;

The light of my life who inspired me to complete this work

To All Those I Say: جزاكم الله خيراً

WESAM

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CONTENTS

	Page
List of Abbreviations.....	I
List of Tables.....	IV
List of Figures.....	VI
Introduction and Aim of the Work.....	1
Review of literature:	5
▪ Chapter (1): Definition, Incidence and Pathophysiology of Heart Failure.....	5
▪ Chapter (2): Classifications of Heart Failure.....	22
▪ Chapter (3): Clinical Presentation of Pediatric Heart Failure.....	32
▪ Chapter (4): Common Causes of Pediatric Heart Failure.....	38
▪ Chapter (5): Diagnostic Modalities of Pediatric Heart Failure.....	51
▪ Chapter (6): Management of Heart Failure.....	60
Patients and Methods.....	72
Results.....	79
Discussion.....	154
Conclusion and recommendations.....	163
Summary.....	166
References.....	169
Arabic Summary.....	190

List of abbreviations

ABGs	Arterial blood gases
ACC	American College of Cardiology
ACE	Angiotensin-Converting Enzyme
AHA	American Heart Association
AHFS	Acute heart failure syndrome
ALT	alanine transferase
ANP	atrial natriuretic peptides
ARB	Angiotensin reseptor blockers
AS	aortic stenosis
ASD	Atrial septal defect
AST	asprtate transferase
AT-II	Angiotensine-II
AV	Atrio-ventricular
AV canal	atrio-ventricular canal
AVP	arginine vasopressin
AVR	aortic valve replacement
BAB	Beta agonist blockers
BB	Beta blockers
BMMNCs	Bone marrow mononuclear cells
BNP	brain natriuretic peptides
BUN	Blood urea nitrogen
CAVC	Complete atrio-ventricular canal
CBC	Complete blood picture
CCF	congestive cardiac failure
CHF	Congestive heart failure
COA	Coarctation of aorta
CRP	C-reactive protien

DCM	Dilated cardiomyopathy
DILV	Double inlet left ventricle
DORV	Double outlet right ventricle
EBCT	Electron beam CT
ECM	Extracellular matrix
ESPAP	End systolic pulmonary artery pressure
ESR	Erythrocyte sedimentation rate
FS %	Fractional shortening
GFR	glomerular filtration rate
HF	Heart failure
HLA	human leukocyte antigen
ICU	Intensive care unit
IDC	Idiopathic dilated cardiomyopathy
Ip3	inositol triphosphate
LV	left ventricle
LVAD	left ventricular assist device
LVH	left ventricular hypertrophy
LVOTO	left ventricular out flow tract obstruction
MCL	mid-clavicular line
MMPs	metalloproteinases
MR	mitral regurgitation
MRI	Magnetic Resonance Imaging
MS	Mitral stenosis
MV	mitral valve
NE	norepinephrine
NEP	neutral endopeptidase enzyme
NYHA	New York heart association
PAT	paroxysmal atrial tachycardia

PDA	Patent ductus arteriosus
PDEI	phosphodiesterase inhibitor
PFO	Patent foramen oval
PH	Pulmonary hypertension
PLV	Partial left ventriculectomy
PR	Pulmonary regurge
PS	Pulmonary stenosis
RAS	Renin-Angiotensine-Aldosteron system
RHD	Rheumatic heart disease
SPSS	Statistical Package for the Social Science
SVT	supraventricular tachycardia
TEE	Tran-esophageal echocardiography
TGA	Transposition of great arteries
TNF	Tumor necrosis factor
TNF-α	tumor necrosis factor-alpha
TR	Tricuspid regurge
VAD	ventricular assist device
VSD	ventricular septal defect
WPW	wolff-parkinson-white

List of Tables

	Page
Table (1): Short-term and long-term pathological responses to impaired cardiac performance in heart failure.	17
Table (2): Classification of Pulmonary Edema on the Basis of Initiating Mechanism.	21
Table (3): Etiological classification of heart failure.	25
Table (4): Causes of congestive heart failure in neonatal period.	40
Table (5): Factors causing myocardial damage.	46
Table (6): Emergency treatment of CHF.	61
Table (7): Non pharmacological therapy of AHF.	69
Table (8): Socioeconomic level according to our scoring system	74
Table (9): Etiology of acute heart failure in the studied cases.	93
Table (10): Clinical data of the studied cases of congenital heart disease.	93
Table (11): Clinical data of the studied cases of RHD.	94
Table (12): Clinical data of the studied cases of Cardiomyopathy.	94
Table (13): Comparison between congenital heart disease, RHD & cardiomyopathy.	95
Table (14): Distribution of the studied cases according to socioeconomic status	95
Table (15): Distribution of the studied cases of AHF in different months.	96
Table (16): Geographic distribution of the AHF patients included in the study.	96
Table (17): Distribution of cases associated with Down syndrome.	97
Table (18): Paste history of the studied cases.	97
Table (19): Consanguinity between parents of the studied cases	97
Table (20): Family history of similar conditions in the studied cases	98
Table (21): Staging of heart failure According to NYHA and Ross classification.	98
Table (22): Clinical manifestations of heart failure in the studied cases.	99

Table (23):	Local examination of the studied cases of AHF.	101
Table (24):	Anemia in the studied cases of AHF.	101
Table (25):	Laboratory findings in the studied groups.	102
Table (26):	Liver enzymes and kidney function in the studied groups.	103
Table (27):	X-ray findings in the studied groups.	104
Table (28):	Echocardiographic findings in the studied groups.	104
Table (29):	Prevalence of congenital cardiac abnormalities among the studied cases of CHD.	105
Table (30):	Prevalence of valvular abnormalities among the studied cases of RHD.	106
Table (31):	Medical management of studied groups.	106

List of Figures

	Page
Figure (1): Frank starling curves	8
Figure (2): Neurohormonal drive in heart failure	11
Figure (3): Overview of the pathophysiology of myocardial remodeling	13
Figure (4): Stages of myocyte hypertrophy	15
Figure (5): Mechanism of progressive cardiac damage in heart failure	16
Figure (6): Morphological Response of cardiac myocytes to hemodynamic Overload	18
Figure (7): possible etiology of virus-induced dilated cardiomyopathy	47
Figure (8): diagnosis of the studied cases of acute heart failure	107
Figure (9): Age distribution of the studied cases of acute heart failure	107
Figure (10): Sex distribution of the studied cases of acute heart failure	108
Figure (11): Mean weight of the studied cases of acute heart failure	108
Figure (12): Mean weight percentile of the studied cases of acute heart failure	109
Figure (13): Mean heart rate of the studied cases of acute heart failure	109
Figure (14): Mean respiratory rate of the studied cases of acute heart failure	110
Figure (15): Mean tempreture rate of the studied cases of acute heart failure	110
Figure (16): Mean liver size (cm) in the studied cases of acute heart failure	111
Figure (17): Mean neck viens level in the studied cases of acute heart failure	111
Figure (18): Mean O2 saturation of the studied cases of acute heart failure	112
Figure (19): Socioeconomic status distribution of the studied cases of acute heart failure	112
Figure (20): monthly distribution of the studied cases of acute heart failure	113
Figure (21): Geographical distribution of the studied cases of acute heart failure	113
Figure (22): Consanguinity distribution of the studied cases of acute heart failure	114
Figure (23): Consanguinity distribution of the studied cases of acute heart failure according to diagnosis	114
Figure (24): Similar conditions distribution of the studied cases of acute heart failure	115

Figure (25):	Similar conditions distribution of the studied cases of acute heart failure according to diagnosis	115
Figure (26):	Orthopnea distribution of the studied cases of acute heart failure	116
Figure (27):	Orthopnea distribution of the studied cases of acute heart failure according to diagnosis	116
Figure (28):	Cough distribution in Figure (29): Hemoptesis distribution in the studied cases of acute heart failure	117
Figure (29):	Cough distribution in the studied cases of acute heart failure according to diagnosis	117
Figure (30):	Hemoptysis distribution in the studied cases of acute heart failure	118
Figure (31):	Abdominal pain distribution in the studied cases of acute heart failure	118
Figure (32):	Abdominal pain distribution in the studied cases of acute heart failure according to diagnosis	119
Figure (33):	Abdominal distention distribution of the studied cases of acute heart failure	119
Figure (34):	Abdominal distention distribution of the studied cases of acute heart failure according to diagnosis	120
Figure (35):	Lower Limb Oedema distribution in the studied cases of acute heart failure	120
Figure (36):	Lower Limb Oedema distribution in the studied cases of acute heart failure according to diagnosis	121
Figure (37):	Central Cyanosis distribution of the studied cases of acute heart failure	121
Figure (38):	Central Cyanosis distribution of the studied cases of acute heart failure according to diagnosis	122
Figure (39):	Syncopal Attacks distribution of the studied cases of acute heart failure	122
Figure (40):	Syncopal Attacks distribution of the studied cases of acute heart failure according to diagnosis	123
Figure (41):	Effort intolerance distribution of the studied cases of acute heart failure	123
Figure (42):	Effort intolerance distribution of the studied cases of acute heart failure according to diagnosis	124
Figure (43):	Peripheral Cyanosis in the studied cases of acute heart failure	124

Figure (44):	Peripheral Cyanosis in the studied cases of acute heart failure according to diagnosis	125
Figure (45):	Palpitation in the studied cases in acute heart failure	125
Figure (46):	Palpitation in the studied cases in acute heart failure according to diagnosis	126
Figure (47):	Embolism in the studied cases of acute heart failure	126
Figure (48):	Cardiomegaly in local examination of the studied cases of acute heart failure	127
Figure (49):	Cardiomegaly in local examination of the studied cases of acute heart failure according to diagnosis	127
Figure (50):	Anemia in the studied cases of acute heart failure	128
Figure (51):	Anemia in the studied cases of acute heart failure according to diagnosis	128
Figure (52):	CRP in the studied cases of acute heart failure	129
Figure (53):	CRP in the studied cases of acute heart failure according to diagnosis	129
Figure (54):	ESR in the studied cases of acute heart failure	130
Figure (55):	ESR in the studied cases of acute heart failure according to diagnosis	130
Figure (56):	Liver function in the studied cases of acute heart failure	131
Figure (57):	Liver function in the studied cases of acute heart failure according to diagnosis	131
Figure (58):	X ray finding in the studied cases of acute heart failure (Cardiomegaly)	132
Figure (59):	X ray finding in the studied cases of acute heart failure (pulmonary congestion)	132
Figure (60):	X ray finding in the studied cases of acute heart failure (pneumonia)	133
Figure (61):	Infective endocarditis in the studied cases of acute heart failure	133
Figure (62):	PH in the studied cases of acute heart failure	134
Figure (63):	PH in the studied cases of acute heart failure according to diagnosis	134
Figure (64):	Circulatory Support in the studied cases of acute heart failure	135
Figure (65):	Circulatory Support in the studied cases of acute heart failure according to diagnosis	135
Figure (66):	digoxin in the studied cases of acute heart failure	136

Figure (67):	digoxin in the studied cases of acute heart failure according to diagnosis	136
Figure (68):	Correlation between heart rate and furosemide dose in the studied cases	137
Figure (69):	Correlation between respiratory rate and furosemide dose in the studied cases.	137
Figure (70):	Correlation between neck veins and furosemide dose in the studied cases	138
Figure (71):	Correlation between liver size and furosemide dose in the studied cases	138
Figure (72):	Correlation between ALT and furosemide dose in the studied cases	139
Figure (73):	Correlation between AST and furosemide dose in the studied cases	139
Figure (74):	Correlation between blood urea nitrogen and furosemide dose in the studied cases.	140
Figure (75):	Correlation between creatinine and furosemide dose in the studied cases	140
Figure (76):	Correlation between Na and furosemide dose in the studied cases.	141
Figure (77):	Correlation between K level and furosemide dose in the studied cases.	141
Figure (78):	Correlation between FS% and furosemide dose in the studied cases.	142
Figure (79):	Correlation between furosemide dose and ESPAP in the study cases.	142
Figure (80):	Correlation between heart rate and captopril dose in the studied cases.	143
Figure (81):	Correlation between respiratory rate and captopril dose in the studied cases.	143
Figure (82):	Correlation between liver and captopril dose in the studied cases.	144
Figure (83):	Correlation between neck veins and captopril dose in the studied cases.	144
Figure (84):	Correlation between ALT and captopril dose in the studied cases.	145
Figure (85):	Correlation between AST and captopril dose in the studied cases	145
Figure (86):	Correlation between blood urea nitrogen and captopril dose in the studied cases	146
Figure (87):	Correlation between creatinine and captopril dose in the studied cases.	146

Figure (88):	Correlation between K level and captopril dose in the studied cases.	147
Figure (89):	Correlation between Captopril dose and ESPAP in the study cases.	147
Figure (90):	Correlation between FS% and captopril dose in the studied cases.	148
Figure (91):	Correlation between heart rate and ALT in the studied cases	148
Figure (92):	Correlation between heart rate and AST in the studied cases	149
Figure (93):	Correlation between heart rate and FS% in the studied cases	149
Figure (94):	Correlation between heart rate and ESPAP in the studied cases.	150
Figure (95):	Correlation between Liver size and ESPAP in the studied cases.	150
Figure (96):	Correlation between Liver size and FS% in the studied cases.	151
Figure (97):	Correlation between neck veins level and ESPAP in the studied cases.	151
Figure (98):	Correlation between ESPAP and FS% in the studied cases.	152
Figure (99):	Correlation between neck veins level and respiratory rate in the studied cases.	152
Figure (100):	Correlation between neck veins level and heart rate in the studied cases.	153