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EPIDEMIOLOGY OF ACYANOTIC CONGENITAL HEART DISEASES IN AL- ZAHRAA MATERNITY AND CHILDREN'S TEACHING HOSPITAL

Dr.Ahmed Labii Salim Alsaad

M.B.ch.B,D.C.H/Peadiatrics.

Iraqi Ministry of Health, Basrah Health Director

dahmdlyby@gmail.com

Dr. Saja Hassan Saleem

M.B.Ch.B.- C.A.B.P - C.A.B NEO.

Al Fayha Teaching Hospital

Sajahhassan9@gmail.com

Dr. Mohammed Azeez Tawfeeq

M.B.Ch.B., D.C.H. \ (Pediatrics)

Iraqi Ministry of Health, Kirkuk Health Directorate,

Kirkuk Teaching Hospital, Kirkuk, Iraq.

hamode0172000@yahoo.com

Dr. Ali Qais Abdulkafi

M.B.Ch.B., D.C.H. \ (Pediatrics)

Iraqi Ministry of Health, Kirkuk Health Directorate,

Director of the Technical Affairs Department,

Kirkuk Teaching Hospital, Kirkuk, Iraq.

Newiraqhospital@yahoo.co.uk

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Abstract

A total of 92 patients suspected to have acyanotic congenital cardiac diseases were sent to the paediatric echocardiography unit at Al-Zahraa maternity and Children's Teaching Hospital from February 15, 2006, to August 15, 2006. The present study is of a cross-sectional nature. In this study, two-dimensional and colour Doppler echocardiography confirmed the diagnosis of acyanotic C.H.D. The total number of patients was 92, of whom 49 were male (53.30%) and 43 were female (46.70%). PDA was more frequent in the female patients, while the other forms of acyanotic C.H.D. were equally or somewhat more frequent in the male patients. The most common age of presentation in individuals with acyanotic C.H.D. was between 1 and 5 years of age (21.2 per cent of the total), followed by the first year of life (49.2 per cent of the total). Shortness of breath was the commonest presenting symptom in cyanotic C.H.D. patients, followed by heart failure (19 cases), being asymptomatic (19 cases), refusal to feed (5 cases), failure to thrive (5 cases), respiratory tract infection (3 cases) and generalised fatigability (3 cases). In patients with acyanotic chronic haemorrhagic illness, growth parameters are affected, particularly weight. Acyanotic chronic haemorrhagic illness affects growth parameters, particularly weight, in patients. , especially weight. In particular, 49 patients (53.2%) and 35 patients (38% of the total) were below the third centile for weight to height. Thirteen (11.96%) patients with acyanotic congenital heart disease had a family history of congenital heart disease. The most common congenital heart disease that causes acyanosis is the ventricular septal defect (60.8% of cases), followed by atrial septal defect (20.6% of cases), endocardial cushion defect (6.5% of cases), patent ductus arteriosus (5.4% of cases), pulmonary stenosis (4.3% of cases), aortic stenosis (1.08% of cases) and tricuspid regurgitation (1.08% of cases). Aim of the study

1. To study the commonest cause of a cyanotic C.H.D among referred patients to pediatrics echocardiography unit of Al -Zahraa maternity and children teaching hospital.

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2. To study the sex and age distribution of acyanotic C.H.D and most common pattern of presentation.
3. To study the growth parameters of a cyanotic C.H.D.
4. To study the family history of cardiac disease in acyanotic C.H.D

Keywords: Acyanotic, congenital heart diseases (CHD), family history, stenosis, echocardiography.

Introduction

Congenital heart illness occurs in 0.5 to 0.8% of cases involving live infants. There is a higher occurrence in stillbirths (3–5%), abortuses (10–25%), and preterm newborns (approximately 2% [excluding PDA]). Congenital heart issues in neonates vary greatly in severity and can cause excessive blood flow to the lungs and high blood pressure in the pulmonary arteries; about 2 to 3 out of every 1,000 infants show signs of heart disease in their first year of life. In 40-50% of newborns with congenital heart abnormalities, diagnosis is made by the first week of life, and for 50-60%, by one month. One common congenital cardiac abnormality is summarized in Table 1.

Acyanotic Congenital Heart Diseases

These were primarily classified into two groups:

1. Lesions with increased volume load: These are lesion types such as ASD, VSD, AV septal defects, and PDA. The most prevalent lesion is a left-to-right shunt.
2. Injuries with increased blood pressure: Usually due to narrowing of one of the main arteries (e.g., coarctation of the aorta) or obstruction to the outflow from the ventricles (e.g., pulmonic or aortic valve stenosis). Lesion with increased volume load:

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Atrial Septal Defect

An atrial septal defect (ASD) can occur in any of the three parts of the atrial septum: the secundum, primum, or sinus venosus. Isolated secundum ASDs represent 7% and occur in 30-50% of cases involving congenital cardiac defects. Autism spectrum disorder outbreaks are rare.

Ostium Secundum Defect Most ASDs are ostium secundum defects in the region of the foramen ovale. They are associated with anatomically normal AV valves. Older symptomatic children usually exhibit secundum ASDs, which may be solitary or many, with apertures of 2 cm or more in diameter. The ladies outnumber the males three to one.

Clinical Manifestations

Asymptomatic children with ostium secundum issues are common. Even with enormous secundum ASD, clinically obvious heart failure is quite rare. In younger children, symptoms of underachievement may be subtle. Older children may present with varying degrees of exercise intolerance.

On physical examination of the chest a mild left precordial protrusion may be palpable. The second heart sound is usually widely split and fixed.

Medical treatment:

Surgical repair or a transcatheter device is recommended if the patient is symptomatic or the QP:QS ratio is 2:1 or higher. Most electives are closed after the first year but before the second year of HS.

More than this:

Down syndrome babies born full-term may outgrow it. Children tolerate secundum ASDs well. Later, signs of heart failure, pulmonary hypertension, atrial dysrhythmias, and tricuspid or mitral insufficiency may develop. Infective endocarditis is quite uncommon.

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Atrial Septal Defects (Endocardial Cushion Defects; Primum Ostium Defects)

An ostium defect at the base of the atrial septum involves the mitral and tricuspid valves. A slit in the anterior leaflet of the mitral valve is generally seen as well. An AV septal defect, AV canal defect, or endocardial cushion defect is a continuous atrial and ventricular septal defect with substantially deficient AV valves. This lesion is typically present at birth in children with Down's syndrome. These anomalies may also occur at different times.

Clinical Signs Presentation

Many children with osmium primum anomalies are asymptomatic, and the anomaly is often identified during routine physical examination. In severe mitral insufficiency with large left-to-right shunts, the clinical picture is that of exercise intolerance, increased fatigability, and recurrent pneumonia.

Medical care:

Risk factors for pulmonary vascular disease appear as early as 6 to 12 months of life and often require surgery in infancy.

Complications

Individuals who were not operated on usually developed pulmonary vascular obstructive disease.

***Sinus venosus atrial septal defect:**

Sinus venosus ASD is a defect in the top part of the atrial septum near the opening of the superior vena cava. Unusual drainage occurs in 30-50% of cases involving the pulmonary veins draining into the superior vena cava.

Presentation

No symptoms. The most prevalent kind is the ostium secundum defect. The outlook is really bright. (1) a visible and unobstructed heart valve

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Patent Ductus Arteriosus

The ratio of female to male patients with PDA is 2:1. Maternal rubella infection in the first trimester of pregnancy is another risk factor for PDA. This condition is a common problem with premature babies.

Clinical Signs Display

Usually, there are no symptoms with a small patent ductus arteriosus ****dose****. Like a large VSD, a large PDA will also cause cardiac failure in infants.

Signs include wide pulse pressure, a bounding pulse in the peripheral arteries, and a continuous machinery-like murmur.

Treatment of PDA is surgical or catheter closure. This statement is true whatever the age of the patient.

Problems and Prognosis

Heart failure, which usually develops in early infancy when there is a big ductus, is extremely unusual when the ductus closes spontaneously after infancy. Anyone can contract infected endocarditis. Emboli can pass into the bloodstream or the lungs. Patients who do not have surgery for a large PDA are at risk for pulmonary hypertension, known as Eisenmenger's syndrome. (1) Defect of the valves of the heart

Ventricular Septal Defect

VSD is the most common congenital heart condition, accounting for 25% of all congenital heart illnesses. Although ventricular septal defects can occur in any region, most are membranous.

Clinical Signs

The presentation of the patient depends on the severity of the VSD and the pulmonary blood flow and pressure.

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Most VSDs are modest, with minimal left-to-right shunt and acceptable pulmonary arterial pressures. In the asymptomatic patients, the heart lesion is usually detected during normal physical check-ups. The holosystolic murmur is often loud, harsh, or blown, often with a thrill, and is best heard along the lower left sternal border.

Large pulmonary vein artery (VSD) with excessive blood flow to the lungs and high blood pressure in the lungs. Symptoms include dyspnea, poor growth, pulmonary infections, early heart failure, and duskeness after illness or tears.

Parents of children with small VSDs should be reassured that the lesion is usually innocuous and should be encouraged to allow the child to enjoy a normal life without limitations on physical activity. We do not recommend surgery at this time. To protect the heart against infective endocarditis, healthy permanent and primary teeth are necessary.

Given during dental check-ups Patients should be given antibiotic prophylaxis before any oropharyngeal surgical operation, including tonsillectomy, adenoidectomy, and other comparable procedures, and before any instrumentation of a genitourinary or lower intestinal organ. The aim of medical therapy in the baby with a large VSD is to control heart failure and avoid pulmonary vascular disease. Heart failure treatment is focused on minimizing the symptoms and keeping the patient's weight and height in the normal range. Sometimes surgery is required.

Complications and Prognosis

The size of the VSD plays a major role in how it evolves. Sporadic closure of 30-50% of minor deformities. Most common in the first 2 years of life. Successful closure rates of up to 80 % for small muscular VSDs and 35 % for membranous VSDs have been reported. Most of these abnormalities close by age four in children; however, spontaneous closure has also been observed in adults. "Exposure to infected endocarditis over the long term is dangerous. Spontaneous

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closure of a moderate or large VSD is uncommon. Babies with significant deformities commonly have heart failure and repeated chest infections. Babies with heart failure will not grow up. Pulmonary hypertension is a result of high blood flow to the lungs. the set $\{1, 2\}$

Acyanotic congenital heart diseases: the obstructive lesions.

pulmonary valve stenosis

Pulmonary valve stenosis is a common cardiac abnormality in Noonan syndrome. It is caused by the heart valves being in the wrong place.

Clinical manifestation of symptoms does not usually occur in patients with mild or moderate stenosis. In severe stenosis, symptoms of right ventricular failure may be evident, such as hepatomegaly, peripheral edema, and exercise intolerance.

Complication and Prognosis

Extreme episodes of heart failure, usually in the first month of birth, are extremely rare. Infective endocarditis is a serious danger in youngsters, although it is infrequent.

Most patients receive balloon valvuloplasty as their first treatment.

Aortic stenosis

Congenital aortic stenosis accounts for about 5% of all congenital cardiac abnormalities observed in children. In aortic stenosis there is a 3:1 ratio in favor of men.

Clinical Manifestations

The symptoms of aortic stenosis in a patient depend on the severity of the obstruction. Critical aortic stenosis is a significant narrowing of the aorta that may develop in the first few months of life and produce symptoms of inadequate cardiac output and left ventricular failure. The patient has substantial heart failure, cardiomegaly, pulmonary edema, and a feeble pulse in all extremities. Most

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children with milder forms of aortic stenosis have no symptoms and grow and develop properly.

Medical Treatment

Balloon valvuloplasty is indicated to prevent left ventricular failure, syncope, and sudden death in children with moderate to severe valvular aortic stenosis.

Expected results

Neonates with substantial aortic stenosis may develop severe cardiac failure. Older infants and children with mild to severe aortic stenosis have a positive outlook. Endocarditis prophylaxis should be performed throughout life.

coarctation of the aorta

The male incidence of the abnormality is 2-fold higher than the female incidence. Aortic coarctation can be seen in Turner syndrome.

Clinical signs of

Aortic coarctation found after infancy usually has no apparent symptoms associated with it. Many individuals with severe coarctation are asymptomatic, while some children and adolescents complain of limb weakness or pain during activity. The usual procedure for older children is to refer those with hypertension diagnosed during a routine physical examination to a cardiologist.

Medical Treatment

The conventional treatment for isolated juxtaductal coarctation is surgical excision of the aorta.

Possible problems and outlook:

Systemic hypertension is associated with serious problems. ^ (1)

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Table (1) Relative frequency of major⁽¹⁾ congenital cardiac lesions⁽¹⁾

	Lesion	% of All Lesions
	Ventricular septal defect	25-30
	Atrial septal defect	6-8
	Patent ductus arteriosus	6-8
	Coarctation of aorta	5-7
	Tetralogy of Fallot	5-7
	Pulmonary valve stenosis	5-7
	Aortic valve stenosis	4-7
	d-Transposition of great arteries	3-5
	Hypoplastic left ventricle	1-3
	Hypoplastic right ventricle	1-3
	Truncus arteriosus	1-2
	Total anomalous pulmonary venous return	1-2
	Tricuspid atresia	1-2
	Single ventricle	1-2
	Double outlet right ventricle	1-2
	Others	5-10

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Patients and Methods

In this cross-sectional study of 92 patients with acyanotic C.H.D were referred to pediatric echocardiography unit of Al-Zahraa maternity and children teaching hospital from 15th February 2006- 15th august 2006,for each patient, the following data had been collected:

- 1-Name, age and sex.
- 2- Presentation.
- 3-Date of diagnosis.
- 4-Family history of congenital cardiac disease.
- 5- Growth parameters including weight, height or length, head circumference and weight to length or height.
- 6-A two – dimensional and colour Doppler echocardiogram was done and diagnosis depends on clinical presentation, chest x-ray, electrocardiogram.

Results

The study included 92 patients who were referred to the pediatric echocardiography unit in Al-Zahraa maternity and Children's Teaching Hospital throughout the period from 15th February 2006 to 15th August 2006. All were acyanotic congenital heart illness patients.

We have observed 49 male patients (53.30% of total) and 43 female patients (46.70% of total). The gender distribution was as follows: an equal number of males and females were diagnosed with VSD and PS (M:F 1:1), except for PDA, where females were more than males (M:F 1:1.5), and AS, where just one female patient was found (as indicated in table 2 and figure 1).

In the first year of life (excluding the neonatal period), 49 patients (53.2%) had acyanotic C.H.D., and 21 patients (22.8%) were between 1 and 5 years of age. (See picture 2 and table 3).

Shortness of breath was the most common symptom. 38 patients (41.3%) with acyanotic C.H.D. Other prevalent manifestations were heart failure, silent failure

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to thrive, and respiratory tract infection in 19 (20.6%), 19 (20.6%), 5 (5.4%), and 5 (5.4%) patients, respectively. Chest infection and generalized fatigability were the least common presentations in three instances (3.2%) (Table 4 and figure 3). Forty-nine patients (53.2%) are below the third percentile for body weight, and 35 patients (38%) are below the third percentile for weight for height. These data show that the growth of patients with acyanotic C.H.D. is affected (See tables 5 and 6).

Positive family history of acyanotic congenital heart illness was identified in 13 cases (11.96% of total).

The most common acyanotic C.H.D. among 92 patients was discovered in 56 patients (60.8% of the total), 19 patients (20.6% of the total), 6 patients (6.5%), 5 patients (5.4%), 4 patients (4.3%), and 1 patient (1.08% of the total), and it was similar for TR. (Table 7 and picture 4).

Study Data: Acyanotic Congenital Heart Disease (C.H.D.)

Table 2: Show sex distribution of various types of acyanotic C.H.D.

Diagnosis	MALE	FEMALE	Male:Female	TOTAL
VSD	28	28	1:1	56
ASD	12	7	1:0.58	19
ECD	4	2	2:1	6
PDA	2	3	1:1.5	5
PS	2	2	1:1	4
AS	-	1	0:1	1
TR	1	-	1:0	1
Total	49	43		92

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Table 3: Show age distribution of acyanotic C.H.D.

Age	Number	Percentage (%)
<1mo.	17	18.4%
1mo.-1year	49	53.2%
1year- 5year	21	22.8%
6year- 9year	2	2.1%
>10year	3	3.2%
Total	92	100%

Table 4: Show clinical presentation of acyanotic C.H.D.

Presentation	Number	Percentage
Shortness of breath	38	41.3%
Heart failure	19	20.6%
Asymptomatic	19	20.6%
Refusal to feed	5	5.4%
Failure to thrive	5	5.4%
Respiratory tract infection	3	3.2%
generalized fatigability	3	3.2%
Total	92	100%

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Table 5: Show the growth pattern of acyanotic C.H.D according to body weight.

Weight (percentile)	Number	Percentage
<3rd p.	49	53.2%
>3rd p.	43	46.8%
Total	92	100%

Table 6: Show the growth pattern of acyanotic C.H.D according to weight to height.

Weight for Height or length (percentile) p.	Number	Percentage
<3rd p.	35	38%
>3rd p.	57	62%
Total	92	100%

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Table (7): Show common causes of acyanotic C.H.D.

Diagnosis	Total NO.	%
VSD	56	60.8%
ASD	19	20.6%
E.C.D	6	6.5%
PDA	5	5.4%
PS	4	4.3%
AS	1	1.08%
TR	1	1.08%
Total	92	100%

Table 8: Show comparison of common causes of acyanotic C.H.D. in different studies.

Lesion	Our study	Baghdad	Saudi Arabia	Peshawar	Mumbai	California	Australia	Nigeria
VSD	60.8	52	32.5	46	27.8	31.2	28.2	38.8
ASD	20.6	2.2	10.4	2.6	9.5	6.1	13.4	-
ECD	6.5	2.2	-	-	2.04	-	-	-
PDA	5.4	13.6	15.8	2.6	4.7	5.5	15.4	20.9
PS	4.3	4.5	10.1	6.6	2.7	13.5	14.2	6.0
AS	1.08	-	2.7	6.6	-	3.7	3.8	3.0
TR	1.08	-	-	0.6	-	-	-	-

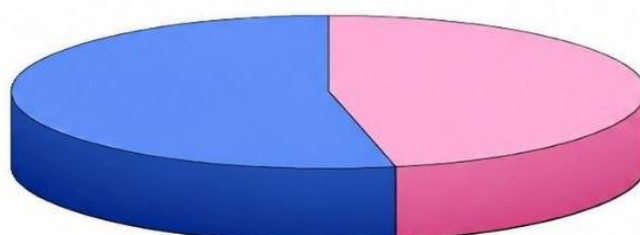
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female 46.70%
male 53.30%

Figure 1: show sex distribution of acyanotic CHD.

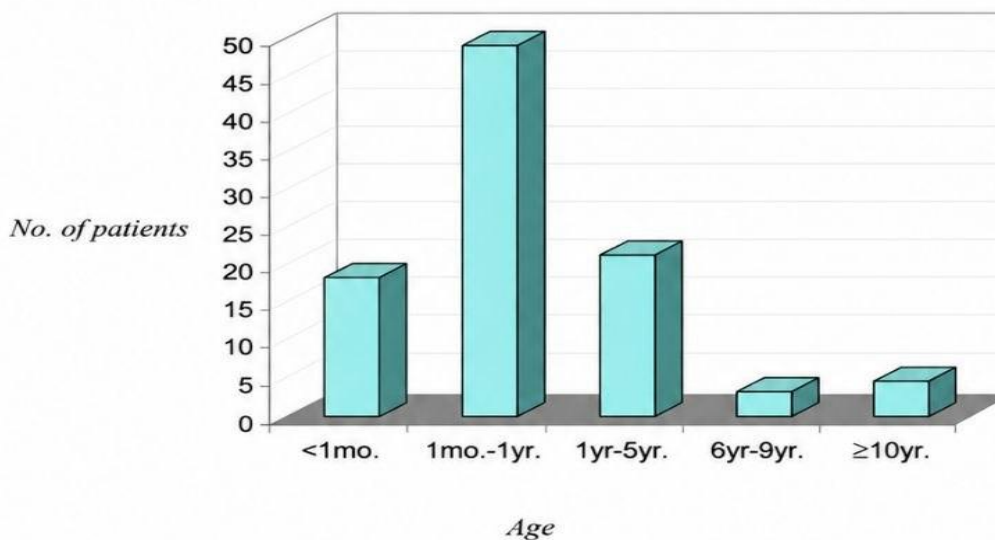


Figure 2:show Age distribution of acyanotic C.H.D.

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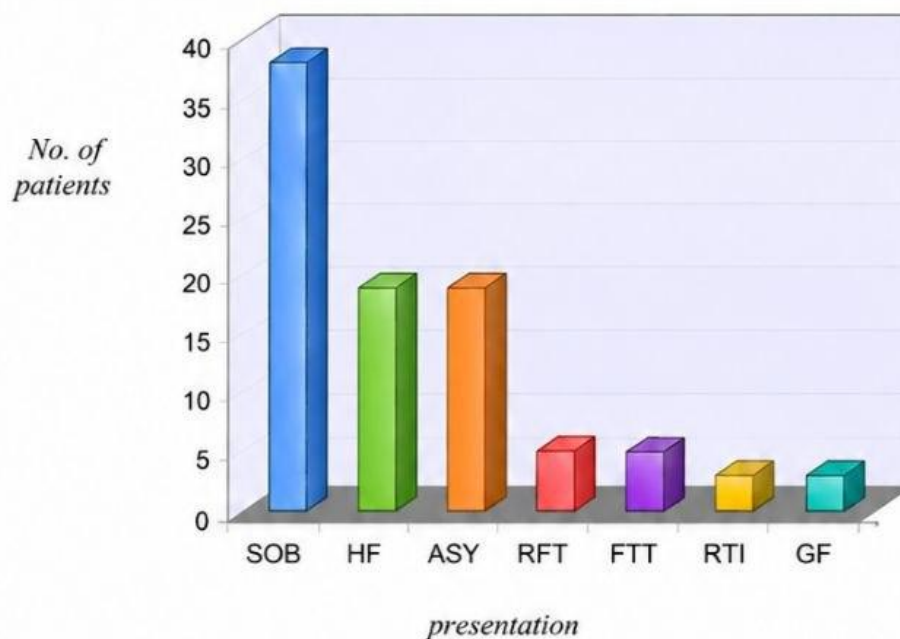
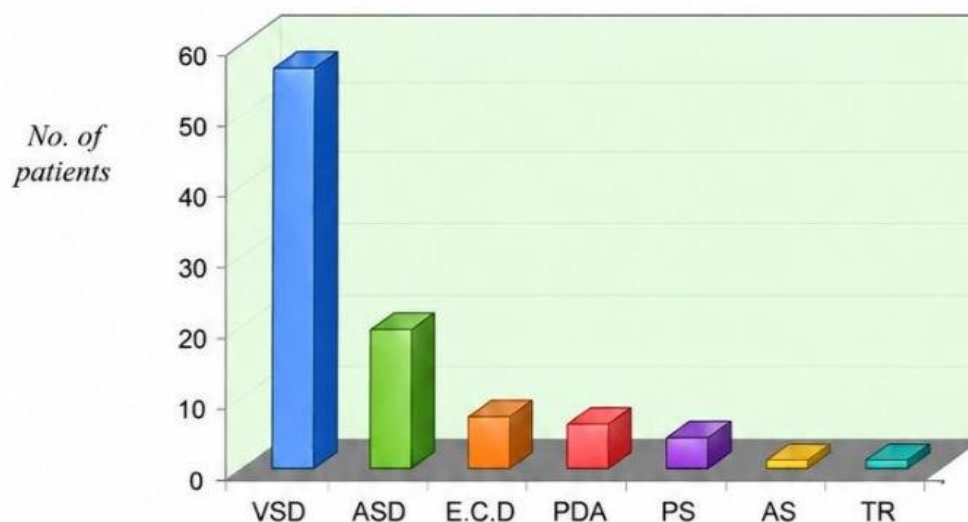


Figure 3 :show Clinical presentation of acyanotic C.H.D

SOB= Shortness Of Breath, HF= Heart Failure ,ASY= Asymptomatic, RFT= Refusal To Feed, FTT= Failure To Thrive ,RTI= Respiratory Tract Infection, GF= Generalized Fatigability.



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Discussion

Congenital heart disease is among the most prevalent conditions in children, occurring in 8 of every 1,000 live births. In our study, the prevalence of acyanotic C.H.D. was higher in males than females. Fifty-nine instances (53.2%) were in men and forty-three cases (46.7%) were in females. These findings are similar to those of a study from central Mumbai and a child welfare hospital in Baghdad. Except for VSD (the ratio of males and females was 1:1), our analysis indicated that acyanotic C.H.D. was more common in males than females. This finding is inconsistent with an earlier study done in child welfare institutions in Baghdad and Saudi Arabia (3, 4). It is consistent with previous research done in these places (three, four). Our investigation confirmed the earlier study in the child welfare hospital in Baghdad that all cases of acyanotic CHD usually present in the first year of life, including the neonatal period. 66 patients participated in the trial, representing 71.73%. We found a similar pattern to the study in central Mumbai. The most prevalent symptoms described by our patients with acyanotic chronic heart failure were shortness of breath (41.3%), heart failure (20.6%), and asymptomatic presentation (6). Our results were different, as more than half of infants with acyanotic C.H.D. had poor growth compared to a study conducted in a child welfare hospital in Baghdad, where 53.2% of patients were below the third percentile for weight.

Table 8 shows that the most frequent type of acyanotic C.H.D. is VSD, with 60.8% instances. This is in agreement with a study done in a child welfare hospital in Baghdad, which showed a 52% incidence. But other studies have reported lower incidence rates, either because of shorter survey durations or because of fewer individuals in our study. We identified an incidence of ASD of 20.6. Like the Australian study, The rate of E.C.D. in our study was higher than that reported in earlier studies (3, 6), which were conducted in child welfare facilities in Baghdad and central Mumbai. The incidence of PDA was lower as compared to earlier research, especially in the tertiary care center of Peshawar and the central

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hospitals of Mumbai. In Baghdad's child welfare hospital, the incidence of PS was 4.3%, which is close to the study's aim of 4.5% (3) (table 8).

Conclusions

- 1.VSDs are the most common of the acyanotic CHDs.
- 2.All other acyanotic C.H.D.s are equally or slightly more common in males, but 2-PDA is more common in females.
- 3- Patients presenting with acyanotic congestive heart failure may have dyspnoea, heart failure or be asymptomatic.
4. Acyanotic chronic haemolytic illness is commonest in the first year of life.
- 5- A positive family history of congenital cardiac disease may be seen in patients with acyanotic congenital heart disease. • Growth retardation is a frequent manifestation of acyanotic CHD.
- 6- All newborns, infants and children with suspected congenital cardiac disease should have a two-dimensional echocardiogram and Doppler study to confirm the diagnosis and direct therapy.

Recommendations

1. Early diagnosis and treatment of cyanotic congenital heart disease in children can reduce morbidity and mortality.
2. Designate a cardiac unit in each governorate for early detection, follow-up and provision of drug and surgical therapy of congestive heart failure.
3. Nutritional rehabilitation is important in the management of acyanotic chronic haemolytic disease (C.H.D.) in growth-delayed patients.
4. It is necessary to have a comprehensive study to know the real prevalence of C.H.D. in our environment.

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References

- 1- Richard E.Behrman, Robert Mo Kliegman, Hal B.Jenson: Nelson Textbook of pediatrics, 17th Edition, 2004. Congenital Heart Disease Page 1499- 1521.
- 2- Richard E.Behrman, Robert Mo Kliegman, Hal B.Jenson: Nelson essentials of pediatrics 14th Edition, 2002 Congenital Heart Disease page 573- 578.
- 3- Mohammad J.Ali, University of Baghdad, Epidemiology of CHD in child welfare hospital in Baghdad (during study from 1st June 2003- 30th June 2004).
- 4- Fuad Abbag: pattern of congenital heart disease in the southwestern region of Saudi Arabia (during study from July 1994 to Jun 1996).
- 5- Fazlur Rahim, Muhammad Younas ,Amin Jan Grandapur and Azmat Talat ; pattern of congenital heart disease in children at tertiary care center in Peshawar; Pakistan journal of medical services no.19 no.1 January- march 2003
- 6- Somali Tank, Sushma Malik, Surekha Joshi; Epidemiology of congenital heart disease among hospitalized patients(during study in public hospital in Central Mumbai from Jan 1996 to Dec 2000).
- 7-Shafqat SH,Thira I.A study of congenital heart disease in Karachi ,Pakistan.Pak Heart J.1978;11(2):7-14.
- 8-Rahimtoola RJ,Majid I,Shafqat SH.et al.Congenital heart disease in children visiting JPMC.Pak Heart J.1980;13(2):21-29.
- 9-Chadha Singh N,Shukla DK :Epidemiological study of congenital heart disease.Indian J Paediatr 2001 Jun;68(6):507-10.
- 10- Hoffman JL Christianson R: Congenital heart disease in cohort of 19,502 births with long term follow up.Am J Cardiol,1978;42:641- 647.
- 11-Caddell JL,Morton P.Pattern of congenital heart disease in Yoruba children of Western Nigeria.Am Heart J 1967;73:431-2.
- 12- Grabitz RG,Joffers MR,Collins- Nakai RL. Congenital heart disease :incidence in the first year of life.The Alberta Heritage Cardiology Program.Am J Epidemiol 1988;128:381- 8.