OUR LIVING REALIST& ASPIRATION REVIEW ON CARDIAC SURGERY PRACTICE OF ALNASSIRRIAH HEART CENTER

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ABSTRACT

Cardiac surgery in our country is a major challenge through maintaining high quality of surgical needs of a very long wait list of the patients while dealing with hindrance budgetary constraints. It has been estimated that approximately 20000 patients (adult & pediatric) per year need operations all over Iraq . Around 1000 patients registrant in NHC however these figure are unaudited statistically the problem could be large magnitude . 30 months of our cardiac surgery department & 200 surgeries done till end of Oct 2011 more than half in participate with foreigners teams. Although the surgical skills have become evolve the basic problem in chiefly results matching those achieved in developed countries centers around finding the fund to run the building programs & retaining trained staff to achieve excellency . We can afford cardiac surgery as its known to developed world when we find the real support for sustenance .

INTRODUCTION

In view of outstanding global heart disease that is expected that Iraqi population of 31 millions according to the recent statistical survey by the Iraqi planning ministry (1), all those at risk of heart disease. there are 7 centers for cardiac disease treatment, 3 center in Baghdad (Ibn albittar ,Ibnanaphis & Iraqi center) established before 20 years ago .2 center in province of Kurdistan(Erbil & Sulaimania), one center in Alnajaf Alashraf seems to work in surgical field over 2 years ago where it underwent a 12 operation with aid of national team & around 50 surgery in collaboration with foreigner teams . in south of Iraq NHC support a large numbers of population, at the same time most of the Iraqi governorates there is a section of heart disease equipped with catheter laboratories involved within general

hospitals. The number of patients with rheumatic heart disease, congenital diseases are continuity accumulate (2). There is an epidemic rise of atherosclerotic coronary disease due to dyslipideamia, hypertension, smoking, inactivity, stressful& change of life style (3). In a study conducted by Dr H Kenzawi the director of NHC found that 2750 patients were admitted to CCU of Alhussain General Hospital from June 2004 till June 2005, 2000 patients had IHD &750 with other heart problems, the total number in actual need for PCI 1087, 75 patients underwent PCI. Virtually all who were affected died without help except for those who travelled toward Baghdad or abroad. Now the situation differ because of new cardiac center in Alnassiriah established at 2007. the 1st open heart surgery in Alnassiriah was performed on April 24th 2009 in collaboration with Ibnalbittar center

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where the team members are Dr A Alansari Dr S Wasfi Dr M Hameed Dr A Kareem Mis S Akber & NHC Dr A Almandil Dr H Hashim Dr J Alwaeli Dr A Abdhussain Dr A Ghani Dr M Alsahalani till the end of oct 2011 a total of 200 operations had been carried out, 112 patients underwent cardiac surgery through a totally 19 week visit from 120 week age cardiac surgical department of NHC with help of foreigners teams sponsored by x vice president Dr A Abdo Almahdi & health ministry ,that extended from national team & from Islamic republic of Iran (Rajai cardiac disease center)& international children heart foundation by Dr W Novick in collaboration with living light organization by Dr N Algaragoli . 72 of 200 patients with acquired heart disease & 128 with congenital heart disease. Coronary artery bypass graft 30 cases topped the list of acquired disease while ASD 47 cases in numbers topped the list of congenital heart disease. These 200 patients are of course far fewer than the estimated a very large number of cardiac diseases in Iraq. To worsen the situation in our country there is a lack of expertise, budgetary constraints & lose of real vision to establish a projects like what's found in developed countries.

PATIENTS & METHODS:-

This was a retrospective study that recruited all patients who underwent cardiac operation between April 2009 & Oct 2011. Echocardiography done for all patients & the confirmed diagnosis in some catheterization study. Total operation time from skin incision to its closure was categorized into average if it's less than 4 hours & prolonged when it's more than that. The duration of ICU stay was categorized as early stay if less than 5 days & prolonged if

more. The last categorization regarding recovery (fully, partially & died).

RESULTS:-

A total of 200 cases of cardiac surgery were done, in equal % for sex distribution. The range of age from 12 days to 75 years, congenital heart disease accounted for the large number of cases that were operated at the unit 128 cases 64%, see Table(1) Aterial Septal Defect accounted for the majority of cardiac diseases 23% (table 2). Again the Aterial septal defect record 40 from 88 done by NHC alone (table 3). Dr W Novicks ICHF paid one explorative visit & 4 working visits to NHC (table 4). The local team (NHC) were put in charge of patients & performed surgery progressively assistance of visiting team or in passive presence of the (non-scrubbed) visiting teams (table 5). There was a significant statistical difference between total operative time & duration of intensive care stay (table 6). Cyanotic congenital heart disease accounted for the majority of cases involved in massive postoperative bleeding mandate reopening (table 7). The majority rate was probably within acceptable limits in a newly established cardiac center. The overall mortality rate was 7%, 11 cases deaths occurring in ICU (table 8). With the initial setting of cardiac surgical departments, majority of patients 93% had fully recovery except 2 patients were discharge with permanent pacemaker

DISCUSSION:-

The majority of patients with cardiac disease underwent surgical interventions had Congenital heart disease due to involvement of NHC with frequent visits & intensive training program for pediatric cardiac surgery in collaboration with ICHF. Further the highest incidence of Aterial septal defect surgery by local team in order to get experience to our staffs, harmony in his work & building trust &reputation was attributed to the type of surgical operations. Highlight on the main operations in our center some for 1st time in Iraq with the help of foreigner's team like TGA for 12 days baby jaten operation, senning operation for 2 years baby & repair of ascending & aortic arch aneurysm for 7 years baby. the study showed that with initial setting of our cardiac surgical department, majority of patients 93% had fully recovery & were discharge, the mortality rate by the hands of local team was 5.6% this points to significant progress in the work of our team while the number of surgical operations compared with time factor for both team deserves to be stopped, hence we hold factors of limited financial support & infrastructure in addition to a lack of personnel working in high stress working against the financial benefit not forgetting that our team is the least number among all centers in Iraq. Tow surgeons to help each other in every surgical procedure, one anesthetist in addition to his work at the center costs in the general hospital, one perfusionist, one intensivist so in the absence of any person for any reason cease to surgical activity.

RECOMMENDATIONS:-

- ➤ Develop a comprehensive & ambitious plan in the short term & medium to build heart surgery by maximizing the number of competent doctors & nurses to cover the huge demand for cardiac surgery
- ➤ The establishment of heart surgery society only registers its employees in cardiac surgery. Cooperation with the ministry of health contributes to the development strategy for the development of heart surgery & find out problems & solutions.
- Configuration medical supply & specialist medications & allocation of financial budget for each center.
- Invite international teams that have a good reputation & involvement in training programs in site.
- Establish a department of scientific research in each center & forcing everyone to submit research & considered a criterion for scientific promotion.

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TABLES:-

Table 1.... Pattern of group of cardiac disease

| Cardiac disease | Frequency | % |
|-----------------|-----------|------|
| Congenital | 128 | 64 |
| Valvulare | 39 | 19.6 |
| Ischemic | 30 | 15 |
| Mass | 3 | 1.33 |

Table 2....distribution of cardiac disease

| Cardiac disease | Frequency |
|---|-----------|
| Aterial septal defect | 47 |
| Mitral valve | 12 |
| Double valve | 9 |
| Triple Valve | 1 |
| Aortic valve | 16 |
| Ventricular septal defect | 37 |
| Coronary | 30 |
| Partial aterioventricular defect | 2 |
| Tetralogy of fallot | 32 |
| Ascending aortic aneurysm | 1 |
| Myxoma | 2 |
| Hydatid cyst | 1 |
| Total anomalous pulmonary venous return | 1 |
| Single ventricle & Tricuspid Artesia | 3 |
| Transposition great artery | 2 |
| Patent ductous arteriosis | 2 |
| Aterioventricular canal | 2 |
| Total | 200 |

Table 3....surgery done by local team

| Cardiac disease | Frequency | % |
|----------------------|-----------|------|
| ASD | 40 | 45.4 |
| CABG | 11 | 12.5 |
| TOF | 10 | 11.3 |
| MVR | 7 | 7.9 |
| VSD | 6 | 6.8 |
| AVR | 6 | 6.8 |
| DVR | 3 | 3.4 |
| Triple valve surgery | 1 | 1.1 |
| MYXOMA | 2 | 2.2 |
| HC | 1 | 1.1 |
| PDA | 1 | 1.1 |
| TOTAL | 88 | 100 |

Table 4.... Types of teamwork labor

| FOREIGNER TEAM | NO. OF VISITS | NO. OF SURGERY | PERIOD |
|----------------|---------------|----------------|--------|
| | | | |
| NATIONAL TEAM | | | |
| IBNALBITTAR | 2 | 6 | 2 WK |
| IRAQI HC | 1 | 1 | 1 DAY |
| INTERNATIONAL | | | |
| IRAN | 4 | 42 | 8 WK |
| ICHF | 4 | 63 | 9 WK |
| TOTAL | 11 | 112 | 19 WK |

Table 5....local team labor

| Type of team | NO. OF SURGERY | CONGENITAL | ACQUIRED |
|---------------------------------|----------------|------------|----------|
| FOREIGNER | | | |
| In case 1 st surgeon | 45 | 39 | 6 |
| In case 2 nd surgeon | 45 | 11 | 34 |
| no scrubbed | 22 | 22 | 0 |
| NHC | 88 | 57 | 31 |

Table 6....total operative time & duration of ICU stay

| Total operative | Duration of ICU stay | | | |
|-----------------|----------------------|-------|---------|-------|
| time | Died in theatre | Short | Prolong | Total |
| SHORT | 0 | 140 | 1 | 141 |
| PROLONG | 3 | 42 | 14 | 59 |
| TOTAL | 3 | 182 | 15 | 200 |

Table 7frequency of reopening surgery

| DISEASE | NO. | % |
|---------|-----|------|
| | | |
| CABG | 1 | 10.1 |
| TOF | 4 | 44.4 |
| AVSD | 1 | 10.1 |
| DVR | 1 | 10.1 |
| MVR | 1 | 10.1 |
| ASD | 1 | 10.1 |
| TOTAL | 9 | 100 |

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Table 8....classification of death cases

| DISEASE | FOREIGNER TEAM | LOCAL TEAM |
|---------|----------------|------------|
| | | |
| AVSD | 3 | 2 |
| CABG | 2 | 1 |
| TOF | 3 | 0 |
| DORV | 1 | 0 |
| MVR | 0 | 1 |
| AVR | 0 | 1 |
| TOTAL | 9 | 5 |

REFERENCE

- 1. Iraqi planning ministry report 2011, www. Iraqi planning ministry .com
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اكبر تحدي تواجهه جراحه القلب في العراق وخاصه في العمليات النوعيه العاليه والتي اصبح عددها كبيرا بحيث طالت قائمه انتظار المرضى هو عائق الوفورات الماليه. يقدر عدد مرضى القلب المحتاجين الى عمليات جراحه القلب بنحو مريض سنويا (كبار و صغار) على المالي وربما العدد مرضى المافي مركز الناصريه للقلب فان عدد المسجلين يصل الى وربما العدد يكون اكبر من ذلك . شهر من عمر قسم جراحه القلب في مركز الناصريه للقلب وبحدود عمليه جراحيه لحد نهايه شهر اكتوبر عام ٢ واكثر من نصف هذه العمليات اجريت بمشاركه فرق اجنبيه .

من تطور المهارات الجراحيه تبقى المشكله الرئيسيه متعلقه بمظاهات نتائج عملنا مع ما يتم تقديمه في المراكز العالميه للدول المتقدمه والتي تحددها عوامل توفير الدعم اللازم لبناء برامج التطوير واستقطاب والمحافظه على الكوادر العامله للوصول الى قمه العطاء . من هنا نستطيع ان نقدم جراحه قلب مثل ما موجود في الدول المتقدمه عند توفر الدعم المستمر والمتواصل لهذا الغرض .