Mitral Valve Surgery in Ibn Albitar Center for Cardiac Surgery from 2004 to 2018

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Abstract

Discuss the outcome of the mitral valve surgery in Ibn Al Bitar Center for cardiac surgery from 2004 to 2018 with 2250 patients ,Assesses the factors of risk for surgical mortality in those who perform surgery for mitral valve and Improve that the out come of mitral valve replacement much better than other types of mitarl valve surgery.The type of this research is a retrospective of a total 2250 patients who performed mitral valve surgery from 2004 to 2018 in Ibn Al Bitar Center for cardiac surgery (Baghdad /Iraq). The mitral valve surgery was mitral valve replacement 82.5% , closed mitral commissurotom 7.1%, open mitral commissurotomy 4.9% and redomitral valve surgery 5.5% . There are only 22 patients die and the causes of the death were Hemorrhage and cardiac temponad in 9 patients (40%), infective endocarditis in 6 patients (27.2%), heart failure in 4 patients (18.1%) , and thromboembolism in 3 patients (13.6%). This study showed that Mitral valve surgery will be performed with a suitable operative mortality that compares favourably with leads to different printed series and future survival for bicuspid valve replacement square measure wonderful additionally to it the incidence to reoperation were considerably less than closed and open commissurotomy,so the bicuspid valve replacement is that the best style of bicuspid valve surgery.

Introduction

The left heart valve functions as a simplex valve between the left atrium of the heart of atrium cordis of the heart and ventricle of the heart. Blood flows from the lungs into the left atrium of the heart of atrium of the heart of the heart thus through the mitral valve into the ventricle [1]. as a results of the ventricle contracts, pumping blood out through the artery to the rest of the body, the mitral valve closes ... preventing blood from flowing backwards into the left atrium[2]. Injury to the left chamber valvecan occur from a defect, the activity of aging, infection, or from a failure. This injury will cause the valve to either "leak" resulting in "mitral regurgitation",or to become "restricted" and not open absolutely, resulting in "mitral stenosis". Injury to the left heart valve interferes with the standard passage of blood through the middle, and ultimately causes blood to back-up into the lungs. this would possibly cause vital metabolism symptoms, and eventually symptom failure. It's for this reason, that a broken left heart valve might eventually ought tobe either repaired or replaced [3]

Mitral valve pathological state is also stricture, regurgitation or combined (regurgitation and stenosis). The etiology varies from inborn, rheumatic, chronic, neoplastic, and ischemic[4]. This surgical procedures for left heart valve surgery embrace repair, replacement, and valvotomies. The clinical introduction of valve corrective at intervalsthe 1960's and increasing trustworthiness of their hemodynamic characteristics and techniques of implantation at intervals the mitral position looked as if it'd have resolved the controversies regarding the treatment of left heart valve disease[5]. Reconstruction is shown to possess sort of blessings over valve replacement, not least the preservation of subvalvular instrumentation

which celebrated to possess useful impact on left chamber perform but cases requiring reoperation thanks torestenosis of left heart valve or prosthetic valve pathology unit of activity increasing[6]. Reoperation itself encompasses a risk, and early and late results don't seem to be primarily satisfying as a results of the persistent left chamber dysfunction[7]

Mitral Valve Stenosis

The interference, evaluation, and treatment of pathology might involve the medical approaches and surgical or percutaneous approaches, like balloon mitral section (balloon mitral valvuloplasty). The prognosis of patients with pathology worsens once their symptoms progress on the such a lot aspect early NYHA useful category II, unless the pathology is mitigated by intervention[12]

Mitral stenosis is outlined by restriction of blood ensue atrium of the middle (LA) to the center ventricle (LV) as a results of a narrowed mitral passage. it's associate degree learned management defect, usually a consequence of rheumatic disorder, although casesof stricture because of noninheritable etiology are usually encountered[8].Intensive mitral circular calcification (MAC) can even end in stricture, significantly

within the aged patients with controller cardiovascular disease usually keep symptom-free for years. once the mitral gap is reduced to a minimum of 1 third of its ancient size, symptoms typical of left-sided cardiovascular disease, like symptom on sweat, orthopnea, and attack nocturnal symptom develop and Right complicated part (RV) failure step by step ensues , inflicting asciltes and swelling [9]. process usually provides sufficiently careful photos of the left cardiac valve and is that the foremost necessary diagnostic tool in establishing the diagnosing. procedure is that the foremost usually used imaging modality within the analysis of controlcardiopathy. A full echocardiographic examination includes second transthoracic or TEE, scientist procedure, and color flow scientist imaging(image1). In most patients, procedure will offer adequate information to formulate a therapeutic strategy whereas not the requirement for organ catherization [10].

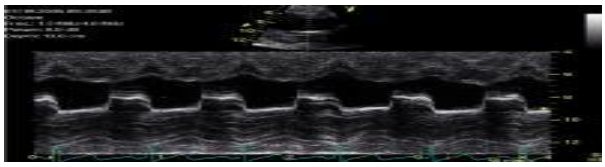

Image 1: M-mode across the mitral valve showing a flat E-F slope resulting from elevated left atrial pressure throughout diastole due to a significant gradient across the mitral valve. Increased thickness and calcification of anterior leaflet of the mitral valve and decreased opening of the anterior and posterior leaflets in diastole are also shown[11]

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Mitral Valve Regurgitation

Heart valves alter forward flow of blood through the inside organ chambers once open and stop backward outpouring once closed. Mitral regurgitation is made public by abnormal flowing of blood through the viscus valvethroughout the heartbeat quantity of the cycle. the center ventricle (LV) should be compelled to pump extravolume to create amends for the amount regurgitated[13]. As mitral regurgitation becomes severe, the continuedhemodynamic burden can cause chamber pathology, upset, and more time. Mitral regurgitation is additionally acute or chronic. procedure has emerged as a results of the diagnostic imaging modality of variousthat might offer vivid photos of the heart valve, and it's planning to offer clues to the mitral-valve abnormalities guilty for the regurgitation. The someone echocardiographic technique is good for decisive the severity of mitral regurgitation[14]. Acute mitral regurgitation usually needs prompt surgical correction, However, symptomatic patients with chronic mitral regurgitation may even be initially treated with digitalis, afterload reduction, and diuretics. once the cardinal perform begins to deteriorate, clinical and echocardiographic parameters(image 2) are usually accustomed ensure the temporal property for surgical reconstruction or replacement of the mitral valve[15].

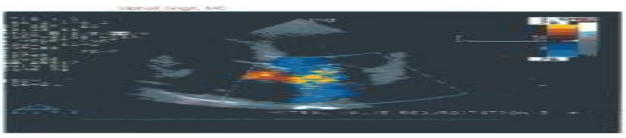


Image 2. Severe mitral regurgitation as represented with color Christian Johann Doppler echocardiography[16]

LV roentgenography is additionally performed to guage mitral regurgitation. The immediate look of medium at intervals the LA once its injection into the fifty five indicates mitral regurgitation[17].

In nearly every instance, the definitive treatment for severe mitral regurgitation is mechanical restoration of the valve operate. Newer surgical procedures, like left heart valve repair (vs MVR) square measure being performed with increasing frequency. In moderately severe mitral regurgitation, ascertaining once valve replacement or repair must be performed is incredibly vital. several clinical and echocardiographic indices square measure accustomed decide the besttemporal arrangement of such surgery[18].

Mitralvalvesurgery

A. Closed Mitral surgical incision The operation for left atrioventricular valve stricture (MS) is known as Closed Mitral valvulotomy (CMV). it's typicallycounseled for patients with alone narrowing of the valve whereas not calcification and in young patients WHO have a conventional regular heart beat. Patients WHO have irregular heart , beat but don't have a clot at intervals the center will even endure this operation provided a Transesophageal process (TEE) shows that there's no clot. However, they have to be treated with blood cutting drugs (anticoagulant) for one ANd a zero.5 month before such Associate in Nursing operation[19] . left atrioventricular valve characteristics were evaluated consistent with echcardiographic rating system devised by Wilkins and associates, the score decided by distribution a most of four points for severity with relevance every of 4 left atrioventricular valve variable :- leaflet quality , leaflet thickening , subvalvular thickening and calcification .The score of left atrioventricular valve characteristic out of sixteen doable points was then calculated. there's a direct relationship between the score and therefore the chance of in balloon surgical incision ,with higher scores mitigating against in intervention. people with a left atrioventricular valve score but eight are wonderful candidates for balloon surgical incision , and people with scores bigger than twelve are less possible to possess a satisfactory result[20]

B. Open operation If the heart valve is leaky or calcified or if the heart valve is morbid or the auriculoventricular valveis morbid , the patient will wish open surgery. Here the middle should be stopped and circulation of blood and process of blood are visiting be taken in short by a machine (Heart internal organ Machine) thus in operation surgeonwill look at intervals the center and perform a procedure to correct the matter. Open surgery on the auriculoventricular valvecould even be Open Mitral Commissurotomy (OMC), Repair of Mitral Valve or Valve Replacement[21]

i) Open mitral Commissurotomy:- Open Mitral Commissurotomy (OMC) is possible if the valve is narrowed and isn't calcified. throughout this the morbid valve is detached directly at a lower place vision [22 [

ii) left heart valve Repair throughout this operation correction of left heart valve stricture (MS) and mitral regurgitation (leaking valves) is completed below vision. This operation is acceptable for young patients, and folks UN agency haven't got calcification. The doc will reconstruct the valve therefore as that its perform is returning back to shut ancient. The advantage is that the patient retains his/her own natural valve. He/she won't want drugs for all his/her life. He/she won't want dearhospital tests. Factors determinative property of surgery for chronic mitral regurgitation embrace :- symptoms ,left chamber (LV) ejection fraction (EF), cardinal end-systolic dimension (LV ESD),atrial fibrillation and metabolismorganhypertension[23.[

iii) left heart valve Replacement:- of the center valve becomes necessary once the valve is severely broken or calcified. it have to be compelled to even be required in patients administrative unit unit undergoing a second operation. In this, medico will remove the center valveand replace it with a artificial valve (Prosthetic valve)(image 3); a valve store-bought from tissue (Bioprosthesis) or with an individual's valves taken from a mortal (Homograft). Sometimes, patients own heart valve unit placed in place of heart valve (Ross II Procedure). the value of such operation is way quite valves repair. else the patient would wish to need medication medicines for the rest of the life. The patient together can want blood and fullytotally totally different tests to look at the perform of the valve at regular intervals. Indications for heart valvereplacement perceive of:- symptomatic standing , incidence of thromboembolic episodes or inflammation , deterioration in pneumonic haemodynamics and muscle perform[24].

Image 3. A Mechanical Valve (left) and a Biological Valve (right)[25]

Aim of Study

Discuss the outcome of the mitral valve surgery in Ibn Al Bitar hospital for cardiac surgery from 2004 to 2018 with 2250 patients, Assesses the factors of risk for surgical mortality in those who perform surgey for mitral valve and Improve that the out come of mitral valve replacement much better than other types of mitarl valve surgery.

Patients and Methods

This is a retrospective study of a total 2250 patients underwent mitral valve surgery from 2004 to 2018 in Ibn Al Bitar hospital for cardiac surgery (Baghdad /Iraq). The gender of our patients is 56% females and 44% males; the mean age of the patients at time of operation was 36 years (ranged from 3 - 72 years). The mitral valve surgery was mitral valve replacement 82.5% , closed mitral commissurotom 7.1% , open mitral commissurotomy 4.9% and

redomitral valve surgery 5.5% .Previous mitral surgery was closed mitral commissurotomy (CMC) in 65 patients (52.4%), mitral valve replacement (MVR) in 27 patients (21.7%), and opened mitral commissurotomy (OMC) in 32 patients (25.8%) . Surgical indication were restenosis after OMC & CMC in 63 patients (50.8%) were restenosis of relative valve area, thrombosis of prosthetic valve in 18 patients (14.5%), mitral regurgitation in 20 patients (16%), infected endocarditis in 15 patients (12%) and paravalvular leak in 8 patients (6.4%).There is only 22 patients die and the causes of the death was Hemorrhage and cardiac temponad in 9 patients (40%), infective endocarditis in 6 patients (27.2%), heart failure in 4 patients (18.1%) , and thromboembolism in 3 patients (13.6%).

Results

Gender: Most of our patients were females (56%), where males were only (44%). The total number of the patients was 2250 as shown in figure 1.

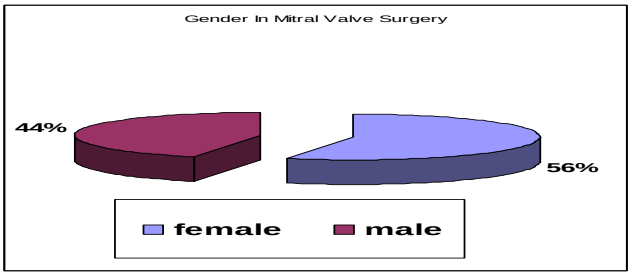


Figure 1. (Female / Male Ratio)

Age. The ages of our patients ranged from 3 – 72 years old with mean age 36 years as shown in figure 2.

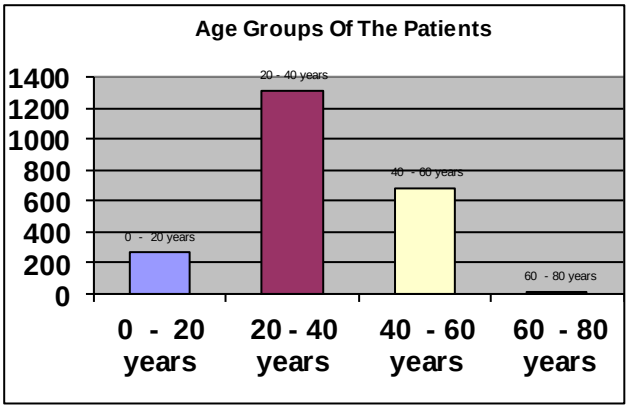


Figure 2. (Age groups in mitral valve diseases)

Blood Groups. The blood groups in mitral valve diseases show in the figure 3

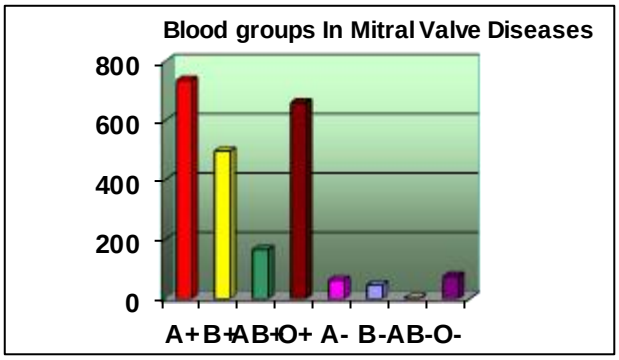


Figure 3. (Blood groups in mitral valve surgery)

ECG. The ECG finding shows that about 36 % present with picture of atrial fibrillation.

ECHO.it show following:-

1.The number of patients with left atrium thrombus(2.2 %) and left ventricular dysfunction(6.8 %)as shown (figure 5)

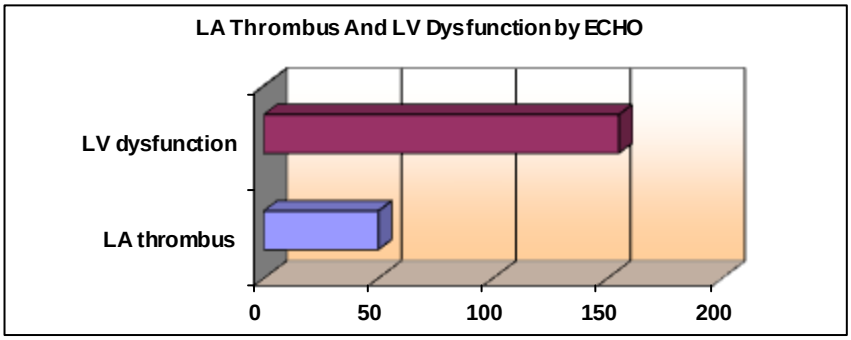


Figure 5. (Patients who had LA thrombus and LV dysfunction)

2. By echo study the type of lesion show in the following figure.

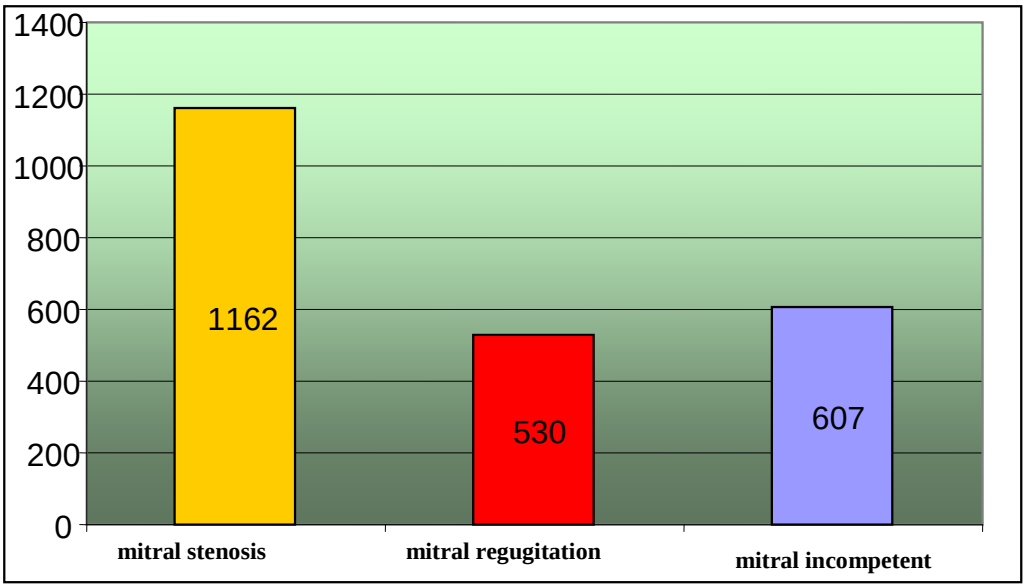


Figure 6. (Types of lesions by echo study)

3. the mitral valve area in the mitral stenosis was:-

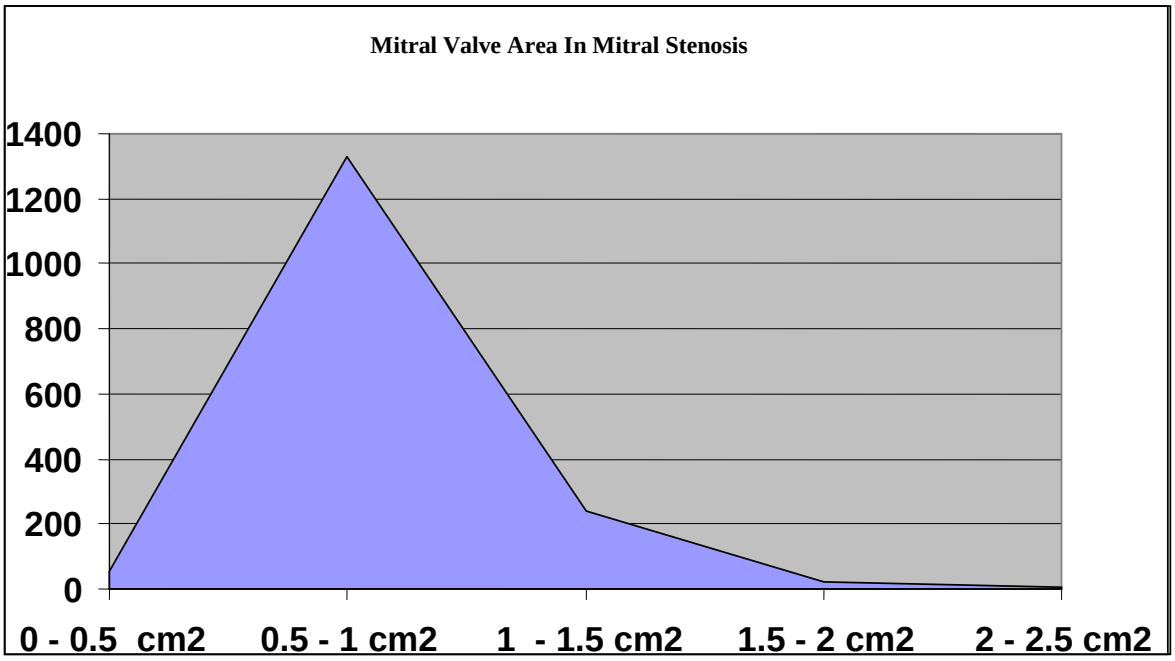


Figure 7.(the mitral valve area in mitral valve stenosis by echo study)

4. The severity of lesion by echostudy:-

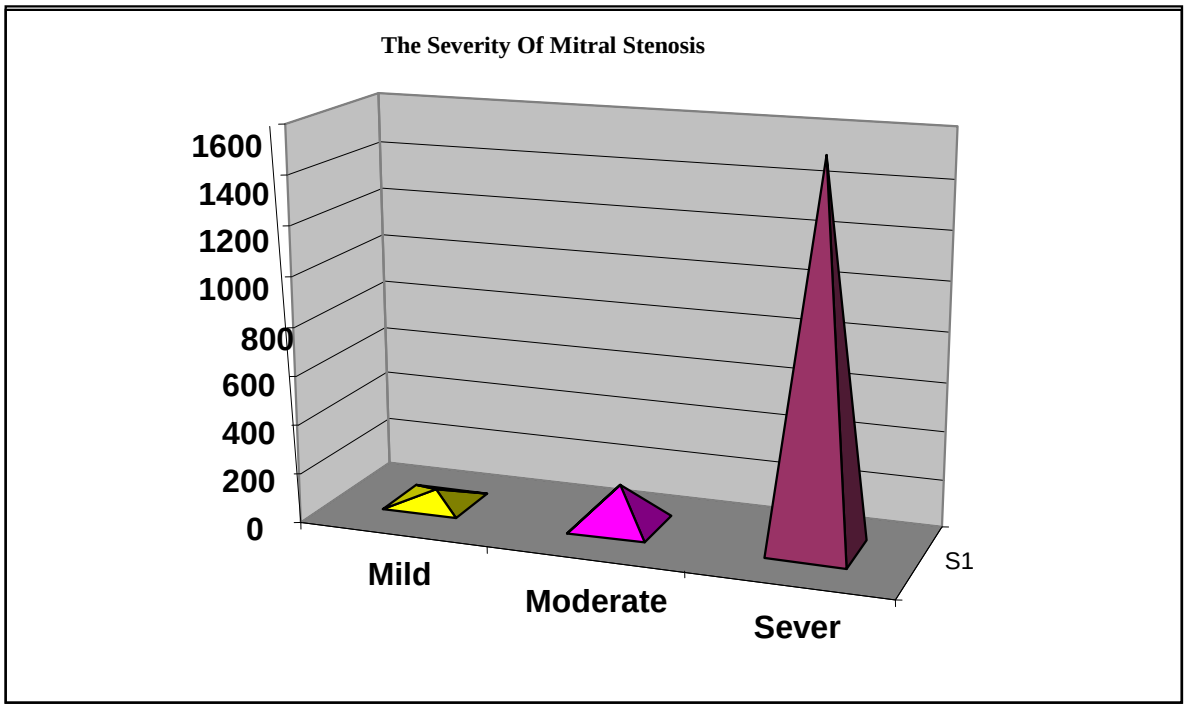


Figure 8.(Severity of mitral stenosis by echo study)

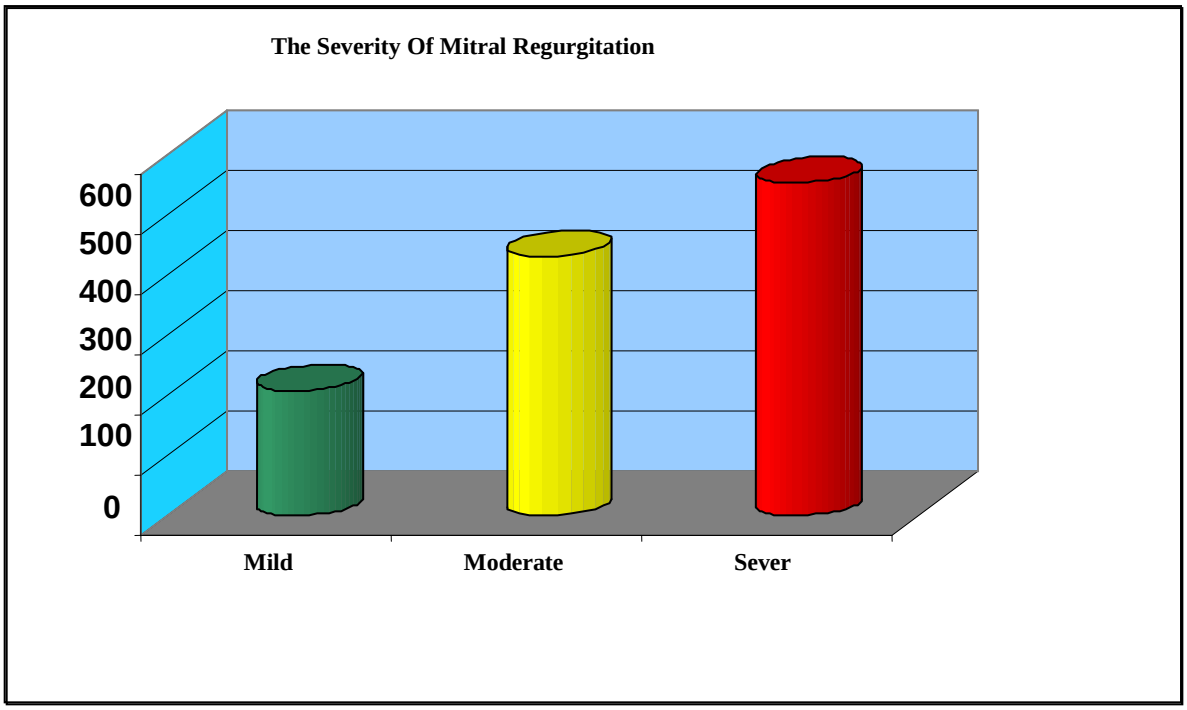


Figure 9.(the severity of mitral regurgitation by echo study)

5. The causes of mitral regurgitation by echo study :-

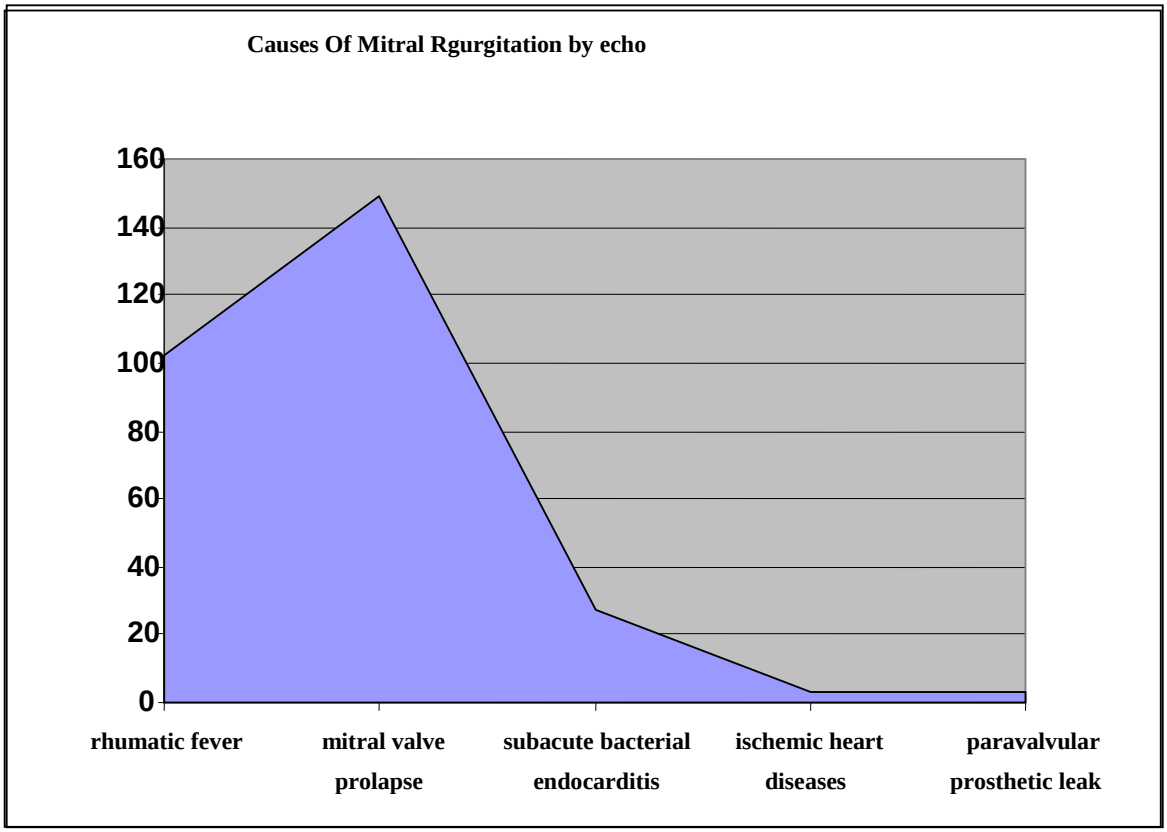
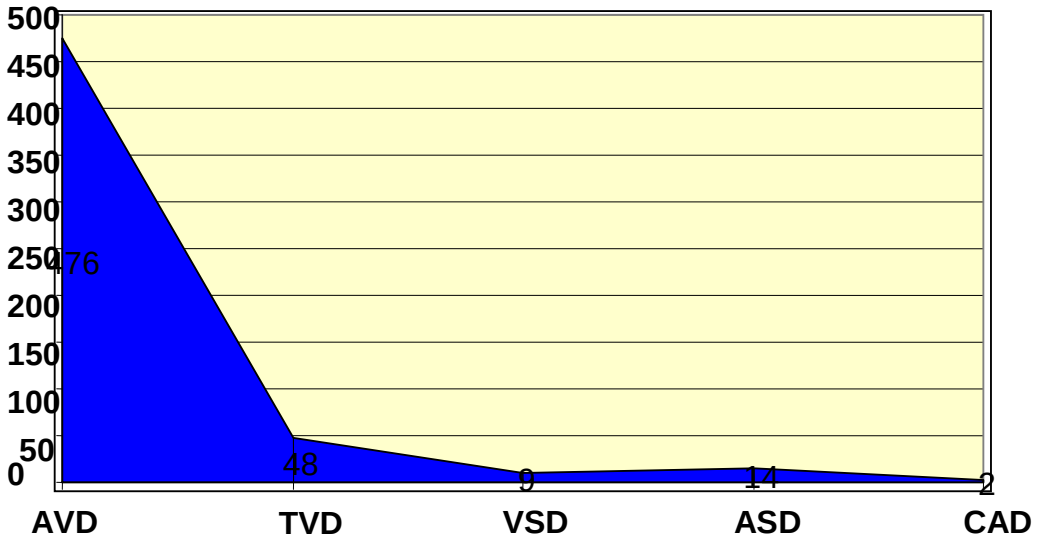


Figure 10.(Causes of mitarl regurgitation)

6. The associated lesion was:- 21 % associated with AVD , 2.1 % associated with TVD , 0.4 % associated with VSD , 0.6 % associated with ASD and 0.08 % associated with CAD.



AVD= aortic valve diseasse, TVD=tricuspe valae diseases, CAD=coranory artery diseases,VSD=ventricular septum defect, ASD=atrial septum defect.

Figure 11.(the associated lesions with mitral valve surgery)

Treatment. it shows the following:-

The types of the mitral valve surgery as the fellowing:-7 % of the patients do closed mitral valvotomy, 5 % of the patients do open mitral commissrutomy , 77 % of the patients do mitral valve replacement ,6 % of the patients do redomitral valve surgery and 5 % of the patients mitral valve repair.

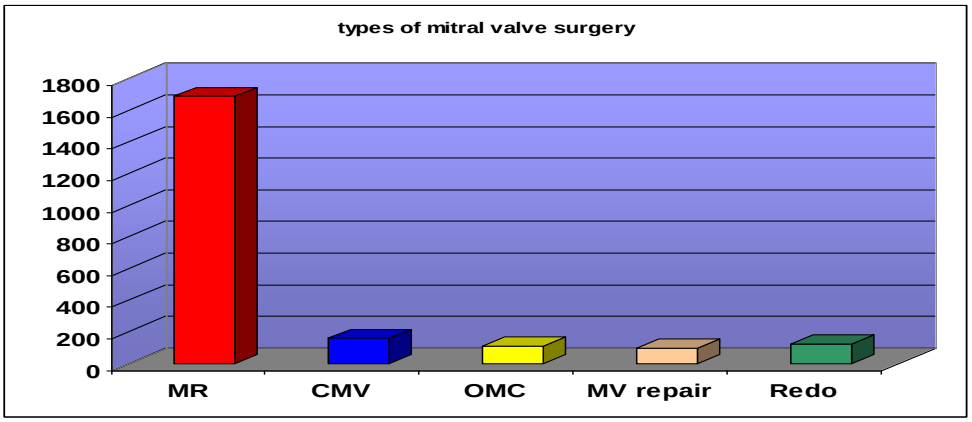


Figure 12.(the types of mitral valve surgery CMV=closed mitral valvotomy, OMC=open mitral commissurotomy, MVR=mitral valve replacement.

The types of the primary mitral valve surgery as the following:-

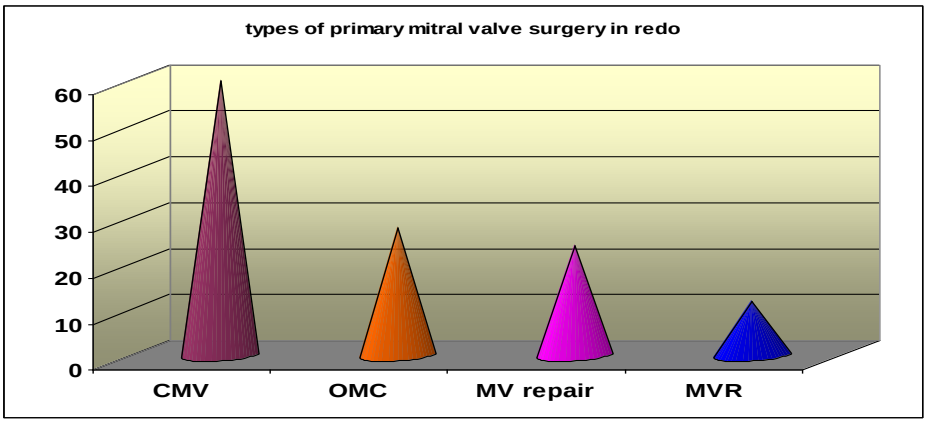
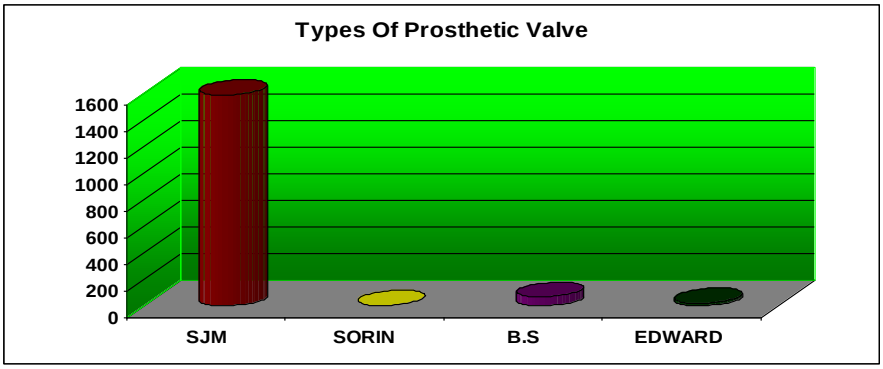


Figure 13.(the types of primary mitral valve surgery)

Types of the prosthetic valve:-



SJM=st. jude medical prosthetic valve , B.S=bijork schilly,

Figure 14.(the types of prosthetic mitral valve)

The percent of usage as the following:-94.3% SJM , 4.1 % B.S ,1.4 % Edwa rd and 0.4 % Sorine.

Complication.the causes and number of the patients that die as the following:- (table 1)

Table -1- causes and number of dead patients

Causes of death	No. of patients	%
Hemorrhage and cardiac tamponade	9	40%
Infective Endocardities	6	27.2%
Heart failure	4	18.1%
Thromboembolism	3	13.6%

Discussions

The reserch focus on types of mitral valve surgery percentage and who patients presents in the Ibn Albitar center for cardiac surgery at Baghdad/Iraq , during the 14-years period between 2004 and 2018.The replacement procedures enhanced considerably during this series, a very important think about the shift toward replacement for the operation of bicuspid valve illness is also a amendment in etiology of bicuspid valve illness,with a lot of rheumatic and fewer chronic and artery disease-related bicuspid valve issues [26]. With the increase at intervals the proportion of pathology cases, the surgery of left atrioventricular valve malady , as elsewhere, has become synonymous with relief of pathology. the popular methodology of accomplishing typically|this can be}often the replacement of the valve, that improved left chamber perform [27].

These information from our own region replicate this necessary trend, affirmative replacement over repair for the treatment in pathology. The indications for left valve surgery in our region have enlarged to incorporateolder and sicker patients. although the number of patients altogether age groups enlarged, the varioustrend of resulting proportion (0%-12.4%) of octogenarians was the foremost apparent modification, adding many older, higher risk patients to the surgical roles. to boot, patients with poorer left chamber perform, written by associate ejection fracation [28]

The results of our study unit relevant for every resource bobbing up with and future outcomes analysis. The shift from mitral repair to replacement in patients with severe mitral regurgitation of chronic and anemia etiology mighteven be fascinating for improved immediate and long risk. numerous sometimes, however, surgery is required to correct acute severe anemia mitral regurgitation. For moderate mitral regurgitation related to anemiadisorder, there's continuing competition with respect to the need for valve repair or replacement and to bootthe effectiveness of varied techniques. It's so reasonable that the enlarged numbers of heart valve replacement procedures won't primarily represent associate improvement in care. the additional hazard of such associateintervention won't outweigh its blessings [29].

The patients undergoing bicuspid valve surgery square measure a heterogeneous cluster, patient disagree in terms of their initial valve operation. yet ,as in factors with reference to the reoperation. The aim of this study was to spot the danger factors for operative mortality among patient undergoing left atrioventricular valve surgery , over all mortality was 1%, which slowly higher than the results published by lytle 11% [30] , cohn 10%[31], akins 7.3%[32], pansini 10% [33] , tyeres 11% [34] and their associates). The research shows poor prolong effects in both open and closed comissurotomy ,the rates of patient survival are within the range of other studies also we found too much reoperations and most patients need mitral valve replacement. The inception of digital commissurotomy and the subsequent introduction of instrumental commissurotomy were consider major breakthroughs in the treatment of mitral stenosis. Later, the development of cardiopulmonary bypass, cardioplegia , and anesthetic techniques enable the safe performance of valvotomy under direct vision . Since that time there has been ongoing controversy about the continued use of closed mitral commissurotomy (CMC). Spencer advocated the use of early open mitral commissurotomy (OMC) and considered the closed technique an inferior operation[35].

Conclusions

Mitral valve surgery will be performed with a suitable operative mortality that compares favourably with leads to different printed series and future survival for bicuspid valve replacement square measure wonderful additionally to it the incidence to reoperation were considerably less than closed and open commissurotomy,so the bicuspid valve replacement is that the best style of bicuspid valve surgery.

Recommendations

In well selected patients with pure stenosis and no leaflet calcification, bicuspid valve replacement is that the best surgery and In older patients tissue valve replacement is preferred than mechanical valves owing to low risk of morbidity and mortality.

CONFLICT OF INTERESTS

There are no conflicts of interest.

References

1. Carpentier A. Cardiac valve surgery—the "French correction". Cardiovasc Surg;86:323-337. 2016

2. Olson LJ, Subramanian R, Ackermann DM, et al. Surgical pathology of the mitral valve: a study of 712 cases spanning 21 years. Mayo Clin Proc;62:22-34. 2015

3. Barlow CW, Imber CJ, Sharples LD, et al. Cost implications of mitral valve replacement versus repair in mitral regurgitation. Circulation;96. II-90–95. 2017

4. Pagani FD, Benedict MB, Marshall BL, et al. The economics of uncomplicated mitral valve surgery. J Heart Valve Dis;6:466-469. 2017

5. Wennberg DE, Birkmeyer JD. *The Dartmouth atlas of cardiovascular health care*, Dartmouth Medical School, Hanover, NH 2015.

6. Birkmeyer NJ, Marrin CA, Morton JR, et al. Decreasing mortality for aortic and mitral valve surgery in Northern New England. Northern New England Cardiovascular Disease Study Group. Ann Thorac Surg;70:432-437. 2016

7. Census US. ST-99-2 State population estimates and demographic components of population change: April 1, 1990, to July 1, 1999: U.S. Census, 2016: Census of population and housing. Available at: www.census.gov/population/estimates/state/st-99-2.txt. Accessed 1999.

8. Statacorp. Nptrend test for trend across ordered groups. Stata Statistical Software: Release 6.0. Vol. 2 H-O. College Station, Texas: Stata Press;. p. 465-8. 2017.

9. Cosgrove DM. Surgery for degenerative mitral valve disease. Semin Thorac Cardiovasc Surg;1:183-193. 1989

10. Deloche A, Jebara VA, Relland JY, et al. Valve repair with Carpentier techniques: the second decade. J Thorac Cardiovasc Surg;99:990-992. 2018

11. Bonow RO, Carabello B, de Leon AC Jr, et al. Guidelines for the management of patients with valvular heart disease: executive summary. A report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on Management of Patients with Valvular Heart Disease). Circulation;98:1949-1984. 2017

12. Lawrie GM. Mitral valve repair vs replacement: current recommendations and long-term results. Cardiol Clin;16:437-448. 2018

13. Kay GL, Aoki A, Zubiate P, et al. Probability of valve repair for pure mitral regurgitation. J Thorac Cardiovasc Surg;108:871-879. 2018

14. Espada R, Westaby S. New developments in mitral valve repair. Curr Opin Cardiol;13:80-84. 2017

15. Rao V, Christakis GT, Weisel RD, et al. Changing pattern of valve surgery. Circulation;94:II113-II120. 2016

16. Thourani VH, Weintraub WS, Craver JM, et al. Ten-year trends in heart valve replacement operations. Ann Thorac Surg;70:448-455. 2017

17. Morewood GH, Gallagher ME, Gaughan JP, et al. Current practice patterns for adult perioperative transesophageal echocardiography in the United States. Anesthesiology;95:1507-1512. 2015

18. Fleischmann KE, Wolff S, Lin CM, et al. Echocardiographic predictors of survival after surgery for mitral regurgitation in the age of valve repair. Am Heart J;131:281-288. 2016

19. Carabello BA: Modern management of mitral stenosis. Circulation 2015 Jul 19; 112(3): 432-7.

20. Carabello BA, Crawford FA, Jr: Valvular Heart Disease. New England Journal of Medicine; 337: 32-41. 2017.

21. Brown JW, Ruzmetov M, Vijay P, et al. Operative results and outcomes in children with Shone's anomaly. *Ann Thorac Surg*. Apr ;79(4):1358-65. 2017.

22. Byrne JG, Aklog L, Adams DH. Assessment and management of functional or ischaemic mitral regurgitation. Lancet;355:1743-1744. 2018.

23. Christenson JT, Simonet F, Bloch A, et al. Should a mild to moderate ischemic mitral valve regurgitation in patients with poor left ventricular function be repaired or not?. J Heart Valve Dis;4:484-489. 2017.

24. Brown JW, Ruzmetov M, Vijay P, et al. Operative results and outcomes in children with Shone's anomaly. *Ann Thorac Surg*. Apr ;79(4):1358-65. 2015.

25. Carabello BA, Crawford FA: Valvular heart disease. N Engl J Med Jul 3; 337(1): 32-41. 2017

26. Duarte IG, Shen Y, MacDonald MJ, et al. Treatment of moderate mitral regurgitation and coronary disease by coronary bypass alone: late results. Ann Thorac Surg;68:426-430. 2016.

27. Chauvaud S, Fuzellier JF, Berrebi A: Long-term (29 years) results of reconstructive surgery in rheumatic mitral valve insufficiency. Circulation Sep 18; 104(12 Suppl 1): I12-5. 2016.

28. ACC/AHA Task Force Report: ACC/AHA Guidelines for the Management of Patients with Valvular Heart Disease. A Report of the American College of Cariology/American Heart Association Task Force on Practice Guidelines (Committee on Management of Patients with valvular Disease). JACC: 1486-588. 2015.

29. Cheitlin MD: Surgery for chronic mitral valve regurgitation: determining the optimal time for intervention. Cardiol Rev; 9(3): 144-5. 2001.

30. lytle BW.cosgrove D M,Taylor PC,Gill CC.Goormastic M.Golding LR,et al,Reoperations for valve surgery,perioperative mortality and determinants of risk for 1000 patients,1958-1984.Ann thoracsurg.,42:632-43. 2016.

31. Cohn LH, Aranki SF, Rizzo RJ, et al. Decrease in operative risk of reoperative valve surgery. Ann Thorac Surg 1993;56:15–20;discussion:20. 2015.

32. Akins, Cw, Buckley Mj, Daggett Wm, Hilgenery AD, Vlahakes Gt, Torchiana DF, et al , Risk bof Reoperative valve replacement for Failed Mitral and aortic bioprostheses , Ann Thoracic surgery;65:1545-52. 2015.

33. Pansini S, Ottino G, Forsennati PG, et al. Reoperations on heart valve protheses: an analysis of operative risks and late results. Ann Thorac Surg;50:590–6. 2017.

34. Tyers Gfo, Jamieson WRE, Murno Al, Germann E, Burr LH, Miyagishma RT, et al, reoperation in Biological and mechanical valve population: fate of the reoperative patient. Ann Thoracic surgery.;60:5,464-9. 2016.

35. Gaasch WH, Eisenhauer AC: The management of mitral valve disease. Curr Opin Cardiol Mar; 11(2): 114-9. 2017.

دراسة حول جراحة الصمام الاكليلي في مركز ابن البيطار لجراحة القلب للفترة من ٢٠٠٤ لغاية ٢٠١٨

الخلاصة

تبحث هذه الدراسة في كفاءة العمليات الجراحية الخاصة بأمراض الصمام الإكليلي التي أجريت ل ٢٢٥٠ مريض في مركز أبن البيطار لجراحة القلب في بغداد/ العراق للفترة من ٢٠٠٤ و لغاية ٢٠١٨ و التي تشمل عمليات تبديل و توسيع وتصليح واعادة جراحة الصمام الاكليلي .حيث تم بحث هذه العمليات عن طريق متابعة المرضى خلال فترة ما قبل العملية بواسطة الفحوصات السريرية و المختبرية و أثناء وفترة ما بعد العملية بواسطة المضاعفات ألآنية و المستقبلية و ما لها من أثار سلبية على المرضى ولقد كانت النتائج في نهاية البحث واضحة جدا في أثبات كفاءة عملية تبديل الصمام الإكليلي بأخر صناعي و اعتبارها العملية الأكثر نجاح في جراحة الصمام الإكليلي لما لها من نتائج جيدة على المدى البعيد بالنسبة للمريض مع انخفاض كبير لاحتمالية تعرض المريض لإعادة جراحة الصمام الإكليلي في المستقبل عند المقارنة مع انواع الجراحة الاخرى.

الكلمات الدالة: تبديل الصمام الاكليلي , توسيع الصمام الاكليلي بالطريقة المفتوحة , توسيع الصمام الاكليلي بالطريقة المغلقة.