CURRICULUM VITAE OF DR.C.N.MANJUNATH, DIRECTOR SRI JAYADEVA INSTITUTE OF CARDIOVASCULAR SCIENCES AND RESEARCH

Name : DR. C. N. MANJUNATH

Date of Birth : 20 - 07 - 1957

Age : 58 Years

Sex : Male

Academic Qualification:

<u>Degree</u>		College	University	Year of passing
M.B.B.S M.D. (Gen. Medicine) D.M. (Cardiology)		M.M.C B.M.C K.M.C	Mysore Bangalore Mangalore	1982 1985 1988
Marital Status	:	Married		
Nationality	:	Indian		

Designation : Professor & Head of Cardiology

Director,

Sri Jayadeva Institute of Cardiovascular Sciences & Research, 9th Block Jayanagar Bannerghatta Road, Bangalore – 560069.

E-mail: drcnmanjunath@gmail.com

Phone: 080-22977422, 22977433,

Direct -080 – 22977456 *fax:* 26534477

Cell Phone: 9844006699

Residence: 26692155, 26697558

DR.C.N.MANJUNATH - A PROFILE

Dr.C.N.Manjunath is a Senior Cardiologist and Director of Sri Jayadeva Institute of Cardiovascular Sciences and Research, Bengaluru has recorded 300% overall growth and the Bed Strength has been increased from 330 to 640 beds exclusively for cardiac care. Under his leadership, Sri Jayadeva Institute of Cardiovascular Sciences and Research has introduced and practicing the "Treatment First Payment Next concept". He has very exclusively implemented "Every Needy Patient should be given quality treatment irrespective of financial affordability".

Under this concept, where in thousands of poor patients with cardiac disease irrespective of financial affordability were treated and free treatment is given in deserving poor not only for the people of Karnataka and other parts of the Country and third world countries. He has taken affordable cardiac care across the State by opening branches in Mysore / Kalburgi apart from Bangalore.

He has also organized and participated in many camps across the State and under-privileged and tribal patients are treated. He has mobilized more than 25 Crores donations from various charitable organizations and built up a poor patient corpus fund, the interest generated is utilized for needy and poor. Even medicines are given free of cost for deserving patients.

Recognizing his professional, philanthropic work and social commitments, he was awarded Padma Shree in the year 2007.

He has continued and even contributed much more to the society and also has brought many laurels to the Country in the area of interventional cardiology since then. <u>He has donated Two acres of land for establishing Primary Health Centre in his native village which is functioning.</u>

Dr. C.N.Manjunath, Director of Sri Jayadeva Institute of Cardiovascular Sciences and Research which is a superspeciality Institution with 600 bed strength, offering 24 hours ICCU management, Interventions in Cardiology and Cardiothoracic Surgery. It is one of the largest Single Heart Care Centre in South East Asian Region & this center performs annually about 26,000 Cardiac Cathlab procedures and 3000 Open Heart Surgeries. Institute is also conducting India's largest Post Graduate superspeciality course in D.M. Cardiology with 21 seats / M.Ch Surgery with 12 seats and Cardiac Anaesthesia with 8 Seats. It has the State of art equipments in the form of 7 Cathlabs, 7 Operations Theatres and Non-Invasive laboratories.

Under his leadership, Sri Jayadeva Institute of Cardiovascular Sciences and Research, Bangalore has been accorded NABH Accreditation (National Accreditation Board for Hospitals and Health Care Providers). This is the only Public Heart Institution in the Country to get this distinction.

ADMINISTRATIVE AND INNOVATIVE REVOLUTIONARY MEASURES UNDERTAKEN

\mathbf{BY}

DR.C.N.MANJUNATH AS DIRECTOR

* Institute has achieved 300% growth

Ever since Dr.C.N.Manjunath has taken over the charge as Director of Sri Jayadeva Institute of Cardiovascular Sciences and Research, he has brought in the revolution and metamorphosis thereby providing high quality cardiac care at an affordable cost to all sections of the society. The Institute has recorded 300% growth in the last 9-10 years.

Keeping in view of increasing number of patients, the bed strength of the hospital has been increased from 300-600 exclusively for cardiac care which makes Jayadeva Institute a largest single centre cardiac care destination in South East Asia. Daily this Institute conducts 80-100 Angiogram Procedures including Angioplasties, 15 Open Heart Surgeries, 400-500 Echocardiography tests and attends Out patients of 1000+. To accommodate this huge volume without diluting the quality of care, additional Out Patient Blocks are constructed and laboratory services are extended and even we have introduced appointments to Out Patient Services through SMS.

The top priority is given to cleanliness and hygiene at all levels of services and most patients and visitors wonder stuck and they won't believe that this is a Government run hospital. Today we have shown that the Government run autonomous institute can be managed like a Five Star Hospital which most people think it is next to impossible and we have brought in a corporate work culture with very good public relation and guest relation system.

We have introduced Incentive Scheme for all employees based on performance, productivity and punctuality which has resulted in greater motivation and higher productivity. We have encouraged public private partnership in many areas of services such as CT Angiogram, Nuclear Cardiology and other laboratory services.

We have also introduced Single Window Master Health Check up facility where in all OPD Investigations are done under one roof and reports are given at the end of 2 hours, so that the working class need not spend whole day for evaluation and investigations.

The Institution is running Country's biggest Post Graduate Courses in Cardiology with annual intake of 21 seats in D.M. Cardiology and 12 seats in M.Ch Cardiothoracic Surgery and 8 seats in D.M. Cardiac Anaesthesia. This is the only Institution in the Country where there are 21 Post Doctoral seats in D.M. Cardiology Courses as a result we are producing quality Cardiologists not only for our State and also to the rest of the Country.

To promote Research activities in the Institute, we have introduced Incentive Scheme for Scientific Publications in National and International for the Doctors, as a result we can able to publish 200 research articles in the last 2 years.

We are working on a Novel Slogan "Every Needy Patient shall be given a quality treatment irrespective of financial affordability" despite limited grants from the Government. We have collaborated with more than 25 Charitable Organisations, Non-Government Organisations, Philanthropic bodies which are supporting the treatment of many needy patients. We have very effectively implemented "Treatment First Payment Next" concept where in patients coming for emergency treatment shall be admitted without any advance amount or verifying any documents and treatment is initiated. Our Slogan is "Quality, Charity, Subsidy and Humanitarian Approach". We

have established "Poor Patient Corpus Fund" of Rs. 25.00 Crores, the interest generated is used for poor and needy patients.

To reach people in remote areas and various Districts and Taluk Hospitals, we are very active on Telemedicine Net-works and we are connected with 30 Districts and Medical College Hospitals and providing consultancy services and follow up treatment.

We have also simplified Discharge processes where in billing and payments are done in respective floors. Recently Accountant General of India has audited the Institute's Accounts and have even appreciated that this hospital is a great model for its effective internal finance management and resource mobilization despite 37% deficit in the grants allocation to the Institute by the Government. All Services and maintenance were excellent.

We have also introduced Maternity Leave for all the Employees working on a Contract basis and also the Yeshasvini Scheme & Health Insurance Scheme is being introduced for their health benefits.

We have also introduced Patient Comfort Monitoring Services and Patient Satisfaction Survey to collect the feedback from both Inpatients and patients after discharge. In this survey, we collect feedback regarding the services such as Doctors visit, food, nursing care so that we are subjecting ourselves for self assessment.

In these days many specialists are leaving the Government hospitals and many are reluctant to join the Government Hospitals but in Jayadeva Institute because of excellent working atmosphere, Incentive Schemes, Academic opportunities and ease of promotional issues, there is no shortage of specialists and many specialists are in queue to join and serve the Institute and people.

Today this Institute is attracting patients from all over the world including overseas patients from Indonesia, Pakistan, Bangladesh, Malaysia etc. because of quality cardiac care. There are not many Government Institutions attracting overseas patients. Institute is also attracting Specialists from USA, UK, France, Vietnam, Middle East, China etc., The Specialists from those country's are coming to Institute for undergoing training in Interventional Cardiology and to learn various techniques.

To provide cardiac treatment to Labour Class, Institute has opened a State of Art Cardiac Centre at ESIC, Rajajinagar in the year 2012. The Institute has started another branch in Mysore with 110 bed capacity which is providing cardiac treatment to patients of Mysore, Chamarajanagar, Mercara, Mandya and Hassan State. To reach cardiac patients in remote part of the State, we are establishing one more unit at Kalaburgi and will be functional within 3 months time. This is the only Public Institution in the Country which is having many branches in different parts of the State.

Institute has also created a brand not only nationally even at the international levels as a result we are recognized to do Live Transmission of various procedures to other parts of the world. All this is remarkable and impeccable progress has taken place in the last 9-10 years under the dynamic leadership of Director, Dr.C.N.Manjunath, Sri Jayadeva Institute of Cardiovascular Sciences and Research.

<u>Following are some of the Other achievements made by</u> Dr. C.N. Manjunath:

- 1. Performed more than 26000 Cardiac Interventions including Coronary and Non-Coronary Cases.
- 2. Done Original Research on Accura Balloon resulting in Balloon Valvuloplasty Operations becoming cheaper by 30-40% and thereby providing immense relief to poor patients in India and other developing and underdeveloped nations (Work published in American Journal, Journal of Interventional Cardiology Volume 11 April 1998). This is a boon to poor patients of Third World Nations.

- 3. **Left Atrial Thrombus Classification** is called "**Manjunath's Classification**", published in Catheterization and Cardiovascular Interventions, 74:653-661(2009).
- 4. **Innovated a New Technique** of performing Balloon Mitral Valvuloplasty in difficult cases **called "Manjunath's Technique"** (published in Catheterization Cardiovascular Diagnosis 1998).
- 5. American President Mr. Barack Obama, has applauded the Institute concept of high quality cardiac care at an affordable cost and free in deserving poor under dynamic leadership of Dr. C.N.Manjunath.
- 6. **Mobilised Rs. 25 Crores donations** and created a **poor patient fund** at Sri Jayadeva Institute of Cardiovascular Sciences and Research for the benefit of needy patients undergoing various Heart Surgeries. Interest generated is utilized for Needy poor patients.
- 7. He is Author and Architect of "Hrudaya Sanjeevini Scheme" for the poor Under this Scheme annually 6500 Below poverty Line Needy Patients are treated free of cost which includes Open Heart Surgeries, Bypass Surgeries, Angioplasties, Pacemaker Implantations which are done free of cost. This Scheme is a boon to the poor and needy heart patients.
- 8. **Principal Investigator** in **India's first** Indigenous Recombinant **Streptokinase Study** (Shankinase) in Acute Myocardial Infarction (Heart Attack).
- 9. Performed in India the highest number of Balloon Mitral Valvuloplasty with Acura Balloon besides he has distinction of training American, French, UK, China, Vietnam Cardiologists in the field of Valvuloplasty Procedures at Bangalore and has done India Proud.
- 10.Past President and Permanent Invitee of the Indian College of Cardiology.
- **11.Indo-American Angioplasty Workshop**: **200** Angioplasties for poor patients were conducted in just **5** days free of cost which is a world record. Under this project nearly **1000 Angioplasties** were conducted *free of cost* for deserving poor patients for the last five years.
- **12.**He is instrumental in opening Cardiac Centres for Labour Class and another at Mysore which caters to the Nearly One Crore Population in the region.
- 13.He has authored Schemes for poor patients belonging to Scheduled Caste/Scheduled Tribe Community, wherein all heart related procedures are done free of cost to Schedule Caste / Schedule Tribal Community Patients.
- **14.**He has put **Karnataka and India on World Map** in the area of Balloon Mitral Valvuloplasty Procedures.
- 15. Has more than 250 Publications in International and National Journals.

Awards Received:

- 1. Padma Shree Award 2007
- 2. Millennium Plaque of Honour by Hon'ble Prime Minister of India at 103rd Indian Science Congress, Mysuru 2016
- 3. "Man of the Year" by Bangalore Press Club, 2016
- **4.** Sir C V Raman Young Scientist Award 2001
- 5. Distinguished Service Award September 2006, by World Congress on Clinical and Preventive Cardiology (WCCPC 2006).
- 6. Received "**Doctorate**" from Karnataka State Open University Mysore 2011
- 7. Honored **"Doctorate of Science"** from Rajiv Gandhi University of Health Sciences, Bangalore, on 31st March 2012.
- 8. Distinguished Physician Award by American Association of Cardiologist of Indian Origin March 2003.
- 9. National Recognition Award in the field of Angioplasty 1997.
- 10. Karnataka Rajyotsawa Award 1998.
- 11. Fellow of Indian College of Cardiology
- 12. Fellow of Indian Academy of Medical Specialties
- 13. Life Member of CSI
- 14. Best Citizen Award BCC 1994
- 15. Faculty Member of Asia Pacific Society of Interventional Cardiology
- 16. Best Scientific paper Award South Zone CSI 1995, Pulmonary Venous flow Velocities by TEE before and after PTMC, Bangalore.
- 17. Best paper Award IMA Medical Specialities Conference 1996 Comparative study of PS and Wiktor Coronary, Cochin, Kerala 1990.
- 18. Best paper award "Closure of PDA using Amplatzer Device at 8th Annual Conference of ICC Bhuvaneshwar, Orissa 2001.
- 19. The Great Son of Karnataka 2008 All India Conference of Intellectuals In recognition of his outstanding services, Achievements and contribution.
- **20.** Best Challenging case award TCT conference 2011 at **Sanfrancisco**, **USA**.
- 21. 8th World Congress on Clinical, Preventive Cardiology & Imaging (WCCPCI 2013) Bestowed upon International Award for Excellence in Cardiology September 2013
- 22. Fellow of American College of Cardiology FACC
- 23. Paul Haris Fellow Award by The Rotary Foundation of Rotary International.
- 24. "Sri. Krishna Iyer Award" by Udaya Banu Kalasangha, Bangalore 2016.

Philanthropic Contributions and Charity:

- 1. Has mobilized Rs. 25 Crore donations and established a poor patient fund at Sri Jayadeva Institute of Cardiology for benefit of patients undergoing Heart surgeries.
- 2. He is the Author and Architect of "Hrudaya Sanjeevini Scheme for the poor". Under this scheme annually 7500 Below Poverty Line needy patients are treated free of cost which includes Open Heart Surgeries, By-Pass Surgeries, Angioplasties, Pacemakers Implantations which are done free of cost. This scheme is a boon to the poor and needy heart patients. This scheme is running successfully for the last seven years.
- 3. He has authored and implemented projects for poor patients belonging to Scheduled Cast / Scheduled Tribe Community. Open heart Surgeries and Angioplasties are done free of cost for deserving under privileged patients.
- 4. He has tied with more than 25 Charitable Organizations under which Annually 800 1000 open heart Surgeries, Angioplasties are done free of cost for deserving patients including Children.
- **5.** Mobilization of Finances and Implants for Free Treatment of Patients. Stents, Pacemakers, Valves and other Drugs amounting to Rs. 1.00 Crores used for the treatment of 620 poor patients free of cost. Materials worth Rs. 2.00 Crores were provided to poor patients free of cost.
- 6. As president of Cardiological Society of India, Bangalore Chapter introduced novel scheme for the first time to donate Rs. 5 Lakhs every year towards treatment of poor patients with Heart disease, from the CSI funds.
- 7. In 1997 an Angiography workshop at Chennai under Asia Pacific Society was held, where in 25 poor patients were given angioplasty and stenting procedures free of cost which otherwise would have costed Rs. 32 Lakhs.
- 8. Has donated Rs. 15 Lakhs towards poor patients treatment out of 56th CSI Annual conference savings which was held in December 2004 in Bangalore.
- 9. No Admission fees for Emergency Treatment at SJICR
- 10. Donated 350 Heart Valves & 100 Pacemakers to poor patients worth Rs. 1.5 crores.
- 11. Conducted Angioplasty Workshop at Sri Jayadeva Institute of Cardiology for 25 patients in one day, which is a national record Stents worth Rs. 12 Lakhs was used. In the year 2009 153 patients underwent Angioplasty with stent free
- 12. Has Conducted Annually Indo-American Angioplasty Workshop since 2007, where in 1250 poor patients underwent Free Angioplasty with Stent and worth Rs. 7.5 Crores. Jointly sponsored Dr. Subramani, Wisconsin, USA.

- 13. Free Permanent Pacemaker Implantation donated worth Rs. 75 Lakhs, jointly sponsored by Sri Jayadeva Institute of Cardiology & Dr. Subramani, Wisconsin, USA.
- 14. Free Angioplasty treatment for **1500** patients,
- 15. Free Open Heart Surgeries for **2000** patients,
- 16. **600** artificial Heart Valves donated **75** Free Permanent Pacemaker + 15 ICD,s done with donation from Rotary Bangalore East Pacemaker Bank
- 17. Concessional treatment facilities to the patients coming under Yeshasvini Co-operative Farmers Health Scheme.
- 18. M/s. S.B. Chordia Trust, Chennai has sponsored Rs. 1.5 Crore to treat about 300 poor patients.
- 19. M/s. Ranka Charitable trust donated Rs. 76 Lakhs towards the Surgery / Angioplasty procedures about 195 poor patients.
- 20. Has donated Two acres of land at Native town for the construction of Primary Health Centre, which is already functioning..

Facilities added during his Tenure:

- Introduced Single Window Master Health Check Up facility
- Expansion of General OPD (Out Patient Department)
- Expansion of New OPD
- Modernization of Library
- Establishment of Auditorium
- Establishment of Deluxe Ward in 5th Floor and 6th Floor
- Renovation of Special Ward
- Modernization of Kitchen
- Establishing Accommodation for Post Graduates
- Establishing Accommodation for Patient Visitors
- Addition of Seven (7) Cathlabs This is the only Institute having 7
 Cathlabs under one roof.
- Addition of Operation Theatres
- Establishment of Paediatric and Surgical ICCU's
- Establishment of Tissue Valve Bank
- Parking Slot for Faculties in Hospital Premises
- Introduced Maternity Leave for all Employees working on Contract basis
- Introduction of Yeshasvini Scheme and Health Insurance Scheme for their health benefits
- Introduction of Patient Comfort Monitoring Services & Patient Satisfaction Survey to get the feedback
- Establishment of Two more Branches at Mysuru and Kalburgi

Professional Skills & Achievements:

- 1. Dr. C.N.Manjunath, Director has innovated a new technique of performing Balloon Mitral Valvuloplasty in difficult cases; this is **being called Manjunath's Technique** published in American Journal cathet.Cardiovasc.Diagn 44:23-26 1998Because of his original research, Balloon Mitral Valvuloplasty operation has become cheaper by 30 40% which is a boon to poor patients of India and third world countries.
- 2. Has done <u>highest number of Balloon Mitral Valvuloplasties with</u> <u>Accura Balloon in India</u>, published in Journal of interventional cardiology Vol 11 April 1998.
- 3. <u>Left atrial thrombus classification is called Manjunath's classification</u>, <u>published in Catheterization and Cardiovascular Interventions</u>. 74:653-661(2009).
- 4. <u>Has distinction of Training American, U.K, China and French</u>
 <u>Doctors on Balloon Valvuloplasties at Sri Jayadeva Institute of Cardiology, Bangalore.</u>
- 5. Principal investigator in India's first Indigenous Recombinant Streptokinase study (Shankinase) in Acute Myocardial Infarction (Heart Attack).
- 6. International Authority on Mitral Valvuloplasty Balloon/Catheter.
- 7. Has performed more than 15,000 interventions including Coronary and Non-Coronary cases.
- 8. Has introduced Novel method of Auto transfusion of blood in dieing patients of Cardiac Tamponade during PTMC.
- 9. <u>Has given live demonstration on Balloon Mitral Valvuloplasty and Metal Commissurotome in India and abroad.</u>
- Conducted 200 angioplasties in just 5 days free of cost with joint Sponsorship from NRI USA and SJIC&R - world record in year 2011.
- 11. American President Barack Obama has applauded the Institute's work under the guidance of Dr. C N Manjunath.
- 12. **Opened Jayadeva Branch at Mysore** (110 Bed facility) in the year 2010, which is a great success
- 13. All Indian Institute of Medical Sciences New Delhi visited SJICR to adopt the Jayadeva Model Hospital Administration, basic amenities / facilities to reach common patients.
- 14. Has successfully implemented high quality cardiac care at an affordable cost across the state.
- 15. More than 125 Publications in International and National Journals
- 16. Authored chapters in many Text Books.

Organizational Skills:

- 1. Organising Secretary of 1st National Conference of Indian College of Cardiology Bangalore 1994.
- 2. Organising Secretary of 7th National Conference of Indian College of Cardiology Bangalore 2000.
- 3. Organising Secretary 56th Annual National Conference of Cardiological Society of India, Bangalore 2004, regarded as one of the best Medical conference of India.

Publications:

- 1. Shankarappa RK, Math RS, Papaiah S, Channabasappa YM, Karur S, **Nanjappa MC**. Free floating right atrial thrombus with massive pulmonary embolism:near catastrophic course following thrombolytic therapy. Indian Heart J. 2013 Jul-Aug;65(4):460-3.
- 2. Moorthy N, Ananthakrishna R, Rajendran R, S L GG, Bhat SP, **Nanjappa MC**. Giant Cardiac Hydatid cyst: An Uncommon cause of Cardiomegaly. J Am Coll Cardiol. 2013 Aug 12. doi:pii: S0735-1097(13)03790-X. 10.1016/j.jacc.2013.04.103.
- 3. Ananthakrishna R, Moorthy N, Rao DP, Laksmansastry S, Bhat P, **Nanjappa MC**. "He who knows syphilis knows medicine" the return of an old devil. J Am Coll Cardiol. 2013 Aug 16. doi:pii: S0735-1097(13)03903-X. 10.1016/j.jacc.2013.05.090.
- 4. Srinivas BC, Singla V, Reddy B, Nagesh CM, **Nanjappa MC**. Percutaneous transseptal mitral commissurotomy in a patient with absent right superior vena cava and aneurysmally dilated coronary sinus. Cardiovasc Interv Ther. 2013 Jul 11. [Epub ahead of print]
- 5. Rajendran R, Ananthakrishna R, Rao DP, Bhat P, **Nanjappa MC**. Mobile subpulmonary membrane in a patient with hypertrophic cardiomyopathy and right ventricular mid-cavitary obstruction. Eur Heart J Cardiovasc Imaging. 2013 Jun 24. [Epub ahead of print]
- 6. Singh B, Rajendran R, Singh Y, Singla V, Shankarappa RK, **Nanjappa MC**. Stroke, superior vena cava syndrome, and the snowman in the chest roentgenogram. J Am Coll Cardiol. 2013 Jul 30;62(5):480.
- 7. Rao DP, Ananthakrishna R, **Nanjappa MC**. Pulsatile neck mass: A rare cause. Ann Pediatr Cardiol. 2013 Jan;6(1):95-6.
- 8. Singh B, Kariyappa M, Vijayalakshmi IB, **Nanjappa MC**. Holt-oram syndrome associated with double outlet right ventricle: A rare association. Ann Pediatr Cardiol. 2013 Jan;6(1):90-2.
- 9. Rao VR, Moorthy N, Hegde M, **Nanjappa MC**. An adult with right aortic arch and dysphagia. Eur Heart J. 2013 Mar 28. [Epub ahead of print]
- 10.Rajendran R, Subramanian AP, Mahimarangaiah J, **Nanjappa MC**. A rare cause of unilateral rib notching. J Am Coll Cardiol. 2013 May 14;61(19):2020.

- 11. Shankarappa RK, Papaiah S, Karur S, Math RS, **Nanjappa MC**. Giant right atrium due to congenital dysplastic tricuspid valve in an elderly female patient. Echocardiography. 2013 May;30(5):E128-31.
- 12. Mahimarangariah J, Kikkeri H S, Rai K M, **Nanjappa MC**. Combined transcatheter device closure of ruptured sinus of valsalva and a post-surgical residual ventricular septal defect. Catheter Cardiovasc Interv. 2013 Feb 21. doi: 10.1002/ccd.24889.
- 13. Singh B, Singh Y, Singla V, **Nanjappa MC**. Wellens' syndrome: a classical electrocardiographic sign of impending myocardial infarction. BMJ Case Rep. 2013 Feb 18;2013.
- 14.Singh Y, Kharge J, Ramegowda RT, **Nanjappa MC**. Large atrial thrombus at unusual site: masquerading atrial myxoma. J Thromb Thrombolysis. 2013 Jul;36(1):74-6.
- 15.Singh B, Singh Y, Singla V, **Nanjappa MC**. A common prosthetic valve at uncommon position. BMJ Case Rep. 2013 Jan 17;2013. doi:pii: bcr2012008146. 10.1136/bcr-2012-008146.
- 16.Ananthakrishna R, Shankarappa RK, Jagadeesan N, Math RS, Karur S, **Nanjappa MC**. Infective endocarditis: a rare organism in an uncommon setting. Case Rep Infect Dis. 2012; 2012:307852. doi: 10.1155/2012/307852. Epub 2012 Dec 24.
- 17.Rajendran R, Singh B, Bhat P, **Nanjappa MC**. Subtle chest x-ray signs of pulmonary thromboembolism: the Palla's and Westermark's signs. Postgrad Med J. 2013 Apr;89(1050):241-2.
- 18.Mahimarangaiha J, Sastry UM, Rai M, **Nanjappa MC**. Arterioportal Fistula An Unusual And Treatable Cause of Portal Hypertension. J Pediatr Gastroenterol Nutr. 2012 Dec 10. [Epub ahead of print]
- 19.Shankarappa RK, Math RS, Chikkaswamy SB, Rai MK, Karur S, Dwarakprasad R, **Nanjappa MC**. Transjugular percutaneous transvenous mitral commissurotomy (PTMC) using conventional PTMC equipment in rheumatic mitral stenosis with interruption of inferior vena cava. J Invasive Cardiol. 2012 Dec;24(12):675-8.
- 20.Kharge J, Sreekumar P, Swamy K, Bharatha A, Ramegowda RT, **Nanjappa MC**. Balloon-assisted retrieval of a broken stent-delivery system. Tex Heart Inst J. 2012;39(5):644-6.
- 21.Singh B, Ravindran R, Bhairappa S, **Nanjappa MC**. Giant left atrium with spontaneous echo contrast: a harbinger of thromboembolic phenomenon. BMJ Case Rep. 2012 Sep 30;2012. doi:pii: bcr2012006880. 10.1136/bcr-2012-006880.
- 22. Shankarappa RK, Moorthy N, Bhat P, **Nanjappa MC**. Left ventricular hydatid cyst: an uncommon cause of chest pain in young adults. Cardiol Young. 2013 Jun;23(3):460-2.
- 23.Budnur SC, Singh B, Mahadevappa NC, Reddy B, **Nanjappa MC**. Endovascular treatment of iliac vein compression syndrome (May-Thurner). Cardiovasc Interv Ther. 2013 Jan;28(1):101-5.
- 24.Shankarappa RK, Math RS, Jayan P, Karur S, Seetharam Bhat PS, **Nanjappa MC**. Congenital absence of right superior vena cava: a "stomach" within the heart. Tex Heart Inst J. 2012;39(2):300-2.

- 25.Ramegowda RT, Chikkaswamy SB, Bharatha A, Radhakrishna J, Krishnanaik GB, **Nanjappa MC**, Panneerselvam A. Circumferential stent fracture: novel detection and treatment with the use of StentBoost. Tex Heart Inst J. 2012;39(3):431-4.
- 26.Kulkarni AV, Rao SK, Ananthakrishna R, **Nanjappa MC**. Cardiac necklace in rheumatic heart disease. BMJ Case Rep. 2012 Jan 18;2012. doi:pii: bcr0820114593. 10.1136/bcr.08.2011.4593.
- 27.Ananthakrishna R, Katti PY, **Nanjappa MC**. Fallacious electrocardiographic interpretation in acute myocardial infarction. BMJ Case Rep. 2012 Feb 21;2012. doi:pii: bcr1120115228. 10.1136/bcr.11.2011.5228.
- 28. Nanjappa MC, Ananthakrishna R, Hemanna Setty SK, Bhat P, Shankarappa RK, Panneerselvam A, Kamalapurkar G, Bhat SP, Rao VR. Acute severe mitral regurgitation following balloon mitral valvotomy: echocardiographic features, operative findings, and outcome in 50 surgical cases. Catheter Cardiovasc Interv. 2013 Mar;81(4):603-8.
- 29.Panneerselvam A, Shankarappa RK, **Nanjappa MC**. Tombstone-like electrocardiographic changes during exercise stress test. J Electrocardiol. 2012 Jan-Feb;45(1):13-4.
- 30.**Nanjappa MC**, Bhat P, Panneerselvam A. Modified technique of BMV for severe submitral stenosis. J Invasive Cardiol. 2011 Sep;23(9):387-8.
- 31. Jayan P, Shankarappa RK, Ananthakrishna R, **Nanjappa MC**. Isolated left ventricular noncompaction mimicking ventricular mass. Echocardiography. 2011 Aug;28(7):E137-9.
- 32. Panneerselvam A, Ananthakrishna R, Bhat P, **Nanjappa MC**. Collar bone left atrium. Echocardiography. 2011 May;28(5):E104-5.
- 33. Ananthakrishna R, **Nanjappa MC**, Kamalapurkar G, Bhat P, Panneerselvam A, Chander N, Chandrasekaran D. Cardiac tumour in a patient with rheumatic heart disease. BMJ Case Rep. 2011 Sep 8;2011. doi:pii: bcr0420114146. 10.1136/bcr.04.2011.4146.
- 34.Panneerselvam A, Krishnamurthy AH, Bhat P, **Nanjappa MC**. Delayed contrast enhancement in MRI in takotsubo cardiomyopathy. BMJ Case Rep. 2011 Sep 7;2011. doi:pii: bcr0620114324. 10.1136/bcr.06.2011.4324.
- 35.Shankarappa RK, Ananthakrishna R, Math RS, Yalagudri SD, Karur S, Dwarakaprasad R, **Nanjappa MC**, Molho-Pessach V. Accelerated coronary atherosclerosis and H syndrome. BMJ Case Rep. 2011 Oct 4;2011. doi:pii: bcr0320114019. 10.1136/bcr.03.2011.4019.
- 36.Bhat P, Ananthakrishna R, Panneerselvam A, Yalagudri SD, Rao PS, **Nanjappa MC**. Recurrent chylopericardium. BMJ Case Rep. 2011 Aug 24;2011. doi:pii: bcr0720114520. 10.1136/bcr.07.2011.4520.
- 37.Ramalingam R, Patil SS, Ananthakrishna R, **Nanjappa MC**. Pacemaker lead-straight through the heart. BMJ Case Rep. 2011 Oct 28;2011. doi:pii: bcr0920114775. 10.1136/bcr.09.2011.4775.
- 38.Karur S, Mahima J, **Nanjappa MC**. Systemic venous collateral channel causing desaturation after bidirectional cavopulmonary anastomosis: percutaneous closure. Cardiol Young. 2011 Feb;21(1):107-9.

- 39.Shankarappa RK, Moorthy N, Chandrasekaran D, **Nanjappa MC**. Giant pulmonary artery aneurysm secondary to primary pulmonary hypertension. Tex Heart Inst J. 2010;37(2):244-5.
- 40.**Nanjappa MC**, Shankarappa RK, Kalpana SR, Bhat P, Moorthy N. Intracardiac thrombi in acute myeloid leukemia: an echocardiographic and autopsy correlation. Echocardiography. 2010 Jan;27(1):E4-8.
- 41.Bhat SP, Moorthy N, Ramalingam R, Jayapal M, **Nanjappa MC**. Angiolymphoid hyperplasia with eosinophilia presenting as a giant axillary artery aneurysm. Vascular. 2010 Jan-Feb;18(1):49-52.
- 42.**Nanjappa MC**, Shankarappa RK, Chandrasekaran D, Moorthy N. Fatal coronary embolism in infective endocarditis associated with chronic rheumatic heart disease: an unexpected transesophageal echocardiographic documentation. Echocardiography. 2009 Aug;26(7):870-2.
- 43. Shankarappa RK, Panneerselvam A, Dwarakaprasad R, Karur S, Krishnanaik GB, **Nanjappa MC**. Spontaneous asymptomatic coronary artery dissection in a young man. J Cardiol. 2009 Dec;54(3):499-502.
- 44. Mohan Rao PS, Moorthy N, Shankarappa RK, Bhat P, **Nanjappa MC**. Giant mediastinal thymolipoma simulating cardiomegaly. J Cardiol. 2009 Oct;54(2):326-9.
- 45. Shankarappa RK, Moorthy N, Bhat SP, Dwarakaprasad R, **Nanjappa MC**. The challenge produced by familial homozygous hypercholesterolemia when treating premature coronary arterial disease in the young. Cardiol Young. 2009 Jun;19(3):257-63.
- 46.Shankarappa RK, Panneerselvam A, **Nanjappa MC**. Periprocedural left main coronary artery dissection successful conservative management. J Invasive Cardiol. 2009 Apr;21(4):E63-4.
- 47.Patra S, Nagesh C, Reddy B, Srinivas B, **Manjunath CN**, Hegde M. Acute pulmonary embolism being the first presentation of undetected HIV infection: report of two cases. Int J STD AIDS. 2013 Jun;24(6):497-9.
- 48.Patra S, Dhadake SM, Agrawal N, **CN** M. Giant left ventricular pseudoaneurysm following acute inferior wall myocardial infarction presenting with acute left ventricular failure: a rare complication. BMJ Case Rep. 2013 Aug 2;2013. doi:pii: bcr2013200270. 10.1136/bcr-2013-200270.
- 49. **Manjunath CN**, Srinivas Kh, Dattatreya P, Sinha N, Sarkar A, Chag M, Mantri R, Kumar AS. The 7th report of the non-coronary cardiac interventions registry of India. Indian Heart J. 2008 Jan-Feb;60(1):73-8.
- 50.Rangaraj R, Moorthy N, Patil SS, **Manjunath C**N. Brugada-type electrocardiographic pattern induced by electrocution. Indian Pacing Electrophysiol J. 2009;9(1):56-9.
- 51. Srinivas SK, **Manjunath CN**. Differential clubbing and cyanosis: classic signs of patent ductus arteriosus with eisenmenger syndrome. Mayo Clin Proc. 2013 Sep;88(9):e105-6.
- 52.Mahla H, Bhairappa S, Bhat P, **Manjunath CN**. Rheumatic mitral stenosis simulating double-orifice mitral valve. BMJ Case Rep. 2013 Sep 2;2013. doi:pii: bcr2013200090. 10.1136/bcr-2013-200090.

- 53. Vijayalakshmi IB, Agrawal N, Mallikarjun K, **Manjunath CN**. 'Floating' left atrial appendage in an infant with chylopericardium. BMJ Case Rep. 2013 Aug 23;2013. doi:pii: bcr2013200275. 10.1136/bcr-2013-200275.
- 54.Patra S, Nagesh C, Reddy B, Srinivas B, **Manjunath CN**, Hegde M. Acute pulmonary embolism being the first presentation of undetected HIV infection: report of two cases. Int J STD AIDS. 2013 Jun;24(6):497-9.
- 55.Mahla H, Bhairappa S, Kr SK, **Manjunath CN**. Unusual cause of acquired RBBB. BMJ Case Rep. 2013 Aug 9;2013. doi:pii: bcr2013200595. 10.1136/bcr-2013-200595.
- 56.Srinivas BC, Kolhari VB, Reddy B, Nagesh, Srinivas S, **Manjunath CN**. A Case of IVC Obstruction (Web) Restenosis with Pseudoaneurysm. J Am Coll Cardiol. 2013 Jul 26. doi:pii: S0735-1097(13)02880-5. 10.1016/j.jacc.2013.04.098.
- 57.Srinivas SK, Rajendran R, Subramanian A, Bhat P, Chandrasekaran D, **Manjunath CN**. Pinhole Mitral Stenosis. Echocardiography. 2013 Aug 10. doi: 10.1111/echo.12321.
- 58.Patra S, Dhadake SM, Agrawal N, Cn M. Giant left ventricular pseudoaneurysm following acute inferior wall myocardial infarction presenting with acute left ventricular failure: a rare complication. BMJ Case Rep. 2013 Aug 2;2013. doi:pii: bcr2013200270. 10.1136/bcr-2013-200270.
- 59.Patra S, Agarwal A, Kumar T, Ravindranath KS, **Manjunath CN**. Giant Right Atrium in a Case with Rheumatic Heart Disease. Echocardiography. 2013 Jul 27. doi: 10.1111/echo.12322.
- 60.Srinivas BC, Patra S, Agrawal N, **Manjunath CN**. Successful catheter directed thrombolysis in postpartum deep venous thrombosis complicated by nicoumalone-induced skin necrosis and failure in retrieval of inferior vena caval filter. BMJ Case Rep. 2013 Jul 25;2013. doi:pii: bcr2013010489. 10.1136/bcr-2013-010489.
- 61. Vijayalakshmi IB, Agrawal N, Mallikarjun K, **Manjunath CN**. The retrieval of the diagnostic catheter which broke and embolised twice. BMJ Case Rep. 2013 Jul 24;2013(jul24_2). doi:pii: bcr2013200058. 10.1136/bcr-2013-200058.
- 62.Srinivas SK, Bhat P, Agrawal N, **Manjunath CN**. Lancisi sign. BMJ Case Rep. 2013 Jul 24;2013(jul24_2). doi:pii: bcr2013200023. 10.1136/bcr-2013-200023.
- 63. Vijayalakshmi IB, Agrawal N, Narasimhan C, Kavya M, Bagi V, **Manjunath CN**. Percutaneous closure of pseudoaneurysm of common iliac artery with amplatzer duct occluder II. Cardiovasc Interv Ther. 2013 Jul 13. [Epub ahead of print]
- 64.Patra S, Sadananda KS, Agrawal N, **Manjunath CN**. Successful retrieval of a fractured and embolised Judkin's catheter during a coronary angiogram. BMJ Case Rep. 2013 Jul 4;2013. doi:pii: bcr2013009848. 10.1136/bcr-2013-009848.
- 65.Srinivas SK, Subramanyam K, Ramalingam R, Bhat S, Kalpana SR, **Manjunath CN**. A Rare Case of Left Ventricular Outflow Tract Mass. Echocardiography. 2013 Jul 4. doi: 10.1111/echo.12294.

- 66.Kharge J, Singh AP, Raghu TR, Hegde M, Bharata A, **Manjunath CN**. Idiopathic Dilatation of the Pulmonary Artery-A Case Report. Echocardiography. 2013 Jul 4. doi: 10.1111/echo.12291.
- 67.Kumar B, Agrawal N, Patra S, **Manjunath CN**. 'Smoking left atrium': an alarm to be vigilant and aggressive. BMJ Case Rep. 2013 Jul 2;2013. doi:pii: bcr2013010369. 10.1136/bcr-2013-010369.
- 68.Nandagopalan S, Suryanarayana AB, Sudarshan TS, Chandrashekar D, **Manjunath CN**. SQL based cardiovascular ultrasound image classification. Int J Data Min Bioinform. 2013;7(3):266-83.
- 69. Singla V, Sharma R, Nagamani AC, **Manjunath CN**. Mycotic aneurysm: a rare and dreaded complication of infective endocarditis. BMJ Case Rep. 2013 Jun 28;2013. doi:pii: bcr2013200016. 10.1136/bcr-2013-200016.
- 70.Srinivasa KH, Agrawal N, Agarwal A, **Manjunath CN**. Dancing vegetations: Kocuria rosea endocarditis. BMJ Case Rep. 2013 Jun 28;2013. doi:pii: bcr2013010339. 10.1136/bcr-2013-010339.
- 71.Singla V, Singh Y, Ravindranath SK, **Manjunath CN**. 'Bird-beak sign' of left atrial thrombus: a guide to management. BMJ Case Rep. 2013 Jun 21;2013. doi:pii: bcr2013010459. 10.1136/bcr-2013-010459.
- 72.Patra S, Srinivas BC, Agrawal N, **Manjunath CN**. Super dominant left anterior descending artery with origin of both posterior descending artery and posterior left ventricular artery from septal branch. BMJ Case Rep. 2013 Jun 13;2013. doi:pii: bcr2013010303. 10.1136/bcr-2013-010303.
- 73. Srinivas SK, Ramalingam R, **Manjunath CN**. A rare case of percutaneous coronary intervention in achondroplasia. J Invasive Cardiol. 2013 Jun;25(6):E136-8.
- 74.Singla V, Singh B, Singh Y, **Manjunath CN**. Ashman phenomenon: a physiological aberration. BMJ Case Rep. 2013 May 24;2013. doi:pii: bcr2013009660. 10.1136/bcr-2013-009660.
- 75. Singh Y, Singla V, Singh B, Rajendran R, Khandenahally RS, **Manjunath CN**. Quadri-chamber cardiac thrombi in alcoholic cardiomyopathy: a rare though ominous finding. Postgrad Med J. 2013 Aug;89(1054):488-9.
- 76. Srinivas SK, Bhat P, Hegde M, **Manjunath CN**. Giant left atrium due to rheumatic mitral regurgitation. J Am Coll Cardiol. 2013 Jul 30;62(5):e9. doi: 10.1016/j.jacc.2013.01.101. Epub 2013 May 23.
- 77.Singh B, Srinivasa KH, Surangi MJ, Rangan K, **Manjunath CN**. Anomalous mitral arcade variant with accessory mitral leaflet and chordae presenting for the first time with acute decompensated heart failure in an adult. Echocardiography. 2013 Aug;30(7):E202-5.
- 78.Kolhari VB, Nagesh CM, Singh Y, **Manjunath CN**. Vanishing right ventricular outflow obstruction: an unusual presentation of mediastinal lymphoma. Eur Heart J. 2013 Jul;34(25):1784. doi: 10.1093/eurheartj/eht147. Epub 2013 May 2.
- 79. Srinivas SK, Hirapur IS, Bhairappa S, **Manjunath CN**. A false-positive ST segment elevation during exercise stress test. BMJ Case Rep. 2013 Apr 16;2013. doi:pii: bcr2013009199. 10.1136/bcr-2013-009199.

- 80.Patil S, Agarwal A, Ramalingam R, Kumar T, Agarwal N, **Manjunath CN**. Successful percutaneous removal of broken mitral valvuloplasty coiled tip guidewire. Cardiovasc Interv Ther. 2013 Apr 10. [Epub ahead of print]
- 81.Srinivas BC, Patra S, Reddy B, Nagesh CM, **Manjunath CN**. Reocclusion and stroke due to immediate plaque protrusion following endovascular treatment of carotid artery successfully treated with intra-arterial urokinase and stent in stent in a patient with Takayasu arteritis with severe disease of all arch vessels. Cardiovasc Interv Ther. 2013 Apr 9. [Epub ahead of print]
- 82.Singh B, Subramanyan A, Jayaranganath M, **Manjunath CN**. Ebstein's Anomaly with Subpulmonary Obstruction- A Rare Association. Echocardiography. 2013 Aug;30(7):E209-12.
- 83.Kolhari VB, Bhairappa S, Prasad NM, **Manjunath CN**. Tuberculosis: still an enigma. Presenting as mycotic aneurysm of aorta. BMJ Case Rep. 2013 Mar 25;2013. doi:pii: bcr2013008869. 10.1136/bcr-2013-008869.
- 84. Subramani KS, Kolhari VB, **Manjunath CN**, Bhairappa S. Familial hypercholesterolaemia presenting with coronary artery disease in a young patient. BMJ Case Rep. 2013 Mar 20;2013. doi:pii: bcr2013008718. 10.1136/bcr-2013-008718.
- 85. Srinivas BC, Singh AP, Nagesh CM, Reddy B, **Manjunath CN**. Transjugular approach for successful recanalization and stenting for inferior vena cava stenosis. Cardiovasc Interv Ther. 2013 Jul;28(3):318-21. doi: 10.1007/s12928-013-0169-9. Epub 2013 Feb 24.
- 86.Singh B, Bhairappa S, Shankar SK, Prasad NM, **Manjunath CN**. Cardiac lipoma at unusual location -- mimicking atrial myxoma. Echocardiography. 2013 Mar;30(3):E72-4. doi: 10.1111/echo.12093. Epub 2013 Jan 11.
- 87.Patra S, Singh AP, Srinivas BC, **Manjunath CN**. Myasthenia crisis following percutaneous coronary intervention in a patient with late onset myasthenia gravis: successful treatment of a unique case. Cardiovasc Interv Ther. 2013 Jul;28(3):279-81. doi: 10.1007/s12928-012-0154-8. Epub 2013 Jan 1.
- 88.Patra S, Singla V, Kharge J, Ravindranath KS, **Manjunath CN**. A patient of Ebstein's anomaly associated with biventricular noncompaction presented with Wolf Parkinson White syndrome A rare presentation. J Cardiovasc Dis Res. 2012 Oct;3(4):323-5. doi: 10.4103/0975-3583.102721.
- 89. **Manjunath CN**, Panneerselvam A, Srinivasa KH, Prabhavathi B, Rangan K, Dhanalakshmi C, Ravindranath KS. Incidence and predictors of atrial septal defect after percutaneous transvenous mitral commissurotomy a transesophageal echocardiographic study of 209 cases. Echocardiography. 2013 Feb;30(2):127-30.
- 90.Rajendran R, Singh B, Bhairappa S, **Manjunath CN**. Differential intraluminal flow turbulence: a marker of aortic dissection. BMJ Case Rep. 2012 Nov 28;2012. doi:pii: bcr2012007429. 10.1136/bcr-2012-007429.

- 91. Chikkaswamy SB, Rai MK, Nagesh CM, Reddy B, Dinesha B, **Manjunath CN**. Preventing a central nervous system catastrophe in a case of Takayasu's arteritis presenting with critical stenosis of all three arch vessels. Cardiovasc Interv Ther. 2012 May;27(2):118-20.
- 92. Srinivas BC, Dattatreya PV, Srinivasa KH, Prabhavathi, **Manjunath CN**. Inferior vena cava obstruction: long-term results of endovascular management. Indian Heart J. 2012 Mar-Apr;64(2):162-9.
- 93.Srinivas BC, Moorthy N, Kuldeep A, Jeevan H, Chandrasekaran D, **Manjunath CN**. Thrombolytic therapy in prosthetic valve thrombosis during early pregnancy. Indian Heart J. 2012 Jan-Feb;64(1):74-6.
- 94.Banu S, Jabir NR, **Manjunath CN**, Shakil S, Kamal MA. C-peptide and its correlation to parameters of insulin resistance in the metabolic syndrome. CNS Neurol Disord Drug Targets. 2011 Dec;10(8):921-7.
- 95.Hanumanthappa NB, Madhusudan G, Mahimarangaiah J, **Manjunath CN**. Hutchinson-Gilford progeria syndrome with severe calcific aortic valve stenosis. Ann Pediatr Cardiol. 2011 Jul;4(2):204-6.
- 96.Math RS, Shankarappa RK, Dwarakaprasad R, Karur S, Bhairappa S, Jayan J P P, **Manjunath CN**. Multiple fractures with pseudoaneurysm formation in a subclavian artery stent. Circulation. 2011 May 24;123(20):e602-4.
- 97. **Manjunath CN**, Srinivasa KH, Panneerselvam A, Prabhavathi B, Ravindranath KS, Rangan K, Dhanalakshmi C. Incidence and predictors of left atrial thrombus in patients with rheumatic mitral stenosis and sinus rhythm: a transesophageal echocardiographic study. Echocardiography. 2011 Apr;28(4):457-60.
- 98. Jayranganath M, Subramanian A, **Manjunath CN**. Congenitally corrected transposition of the great arteries in a patient with cor triatriatum: a rare combination. Pediatr Cardiol. 2011 Apr;32(4):515-7.
- 99.Ravindranath KS, Moorthy N, Palaneeselvam A, Dwarakaprasad R, Satish K, **Manjunath CN**. A clinically masked normotensive aortic coarctation. Indian Heart J. 2010 Jul-Aug;62(4):363-4.
- 100. Jayakeerthi Y, Lokesh, Ravindranath KS, **Manjunath CN**. "Inverted bulb": A rare complication of myocardial infarction--a new sign! Indian Heart J. 2010 Jul-Aug;62(4):357-8.
- 101. Jayaranganath M, Subramanian A, **Manjunath CN**. Retrograde approach for closure of ruptured sinus of Valsalva. J Invasive Cardiol. 2010 Jul;22(7):343-5.
- 102. Prabhavathi B, Ravindranath KS, Moorthy N, **Manjunath CN**. Pseudo-atrial flutter/fibrillation in Parkinson's disease. Indian Heart J. 2009 May-Jun;61(3):296-7.
- 103. **Manjunath CN**, Srinivasa KH, Ravindranath KS, Manohar JS, Prabhavathi B, Dattatreya PV, Sridhar L, Dhanalakshmi C. Balloon mitral valvotomy in patients with mitral stenosis and left atrial thrombus. Catheter Cardiovasc Interv. 2009 Oct 1;74(4):653-61.
- 104. Manjunath C, Srinivas Kh, Dattatreya P, Sinha N, Sarkar A, Chag M, Mantri R, Kumar AS. The 7th report of the non-coronary cardiac interventions registry of India. Indian Heart J. 2008 Jan-Feb;60(1):73-8.

- 105. Rangaraj R, Moorthy N, Patil SS, Manjunath C. Brugada-type electrocardiographic pattern induced by electrocution. Indian Pacing Electrophysiol J. 2009;9(1):56-9.
- 106. Harish RB, Govindaraju V, **Manjunath CN**. Risk prediction-Homocysteine in Coronary Heart Disease Indian J Clin Biochem. 2007 Mar;22(1):18-21.
- 107. Diwedi SK, Hiremath JS, Kerkar PG, Reddy KN, **Manjunath CN**, Ramesh SS, Prabhavati S, Dhobe M, Singh K, Bhusari P, Rao R. Indigenous recombinant streptokinase vs natural streptokinase in acute myocardial infarction patients: Phase III multicentric randomized double blind trial. Indian J Med Sci. 2005 May;59(5):200-7.
- 108. Vasudevan K, **Manjunath CN**, Srinivas KH, Prabhavathi, Davidson D, Kumar S, Yavagal ST. Electrocardiographic localization of the occlusion site in left anterior descending coronary artery in acute anterior myocardial infarction. Indian Heart J. 2004 Jul-Aug;56(4):315-9.
- 109. Govindaraju V, Neelam, **Manjunath CN**, Sundar KK. Lipoprotein (a) in coronary artery disease in Indian population. J Indian Med Assoc. 2003 Aug;101(8):458-60, 462.
- 110. Govindaraju V, Neelam, **Manjunath CN**, Venkataramiah H, Raghu TR. Hyperhomocysteinemia: An emerging risk factor for cardiovascular disease. Indian J Clin Biochem. 2003 Jan;18(1):8-14.
- 111. Srinivasa KH, **Manjunath CN**, Dhanalakshmi C, Patil CB, Venkatesh HV. Transesophageal Doppler echocardiographic study of pulmonary venous flow pattern in severe mitral stenosis and the changes following balloon mitral valvuloplasty. Echocardiography. 2000 Feb;17(2):151-7.
- 112. **Manjunath CN**, Srinivasa KH, Patil CB, Venkatesh HV, Bhoopal TS, Dhanalakshmi C. Balloon mitral valvuloplasty: our experience with a modified technique of crossing the mitral valve in difficult cases. Cathet Cardiovasc Diagn. 1998 May;44(1):23-6.
- 113. Govindaraju V, Prabhudev N, Gurappa M, Jawali VS, Chandrasekhara PM, **Manjunath CN**. Zinc in rheumatic heart valves. J Assoc Physicians India. 1993 Oct;41(10):653-4.
- 114. Kolhari VB, Nagesh CM, Singh Y, **Manjunath CN**. Vanishing right ventricular outflow obstruction: an unusual presentation of mediastinal lymphoma. Eur Heart J. 2013 Jul;34(25):1784. doi: 10.1093/eurheartj/eht147.
- 115. **Nanjappa MC**, Shankarappa RK, Kalpana SR, Bhat P, Moorthy N. Intracardiac thrombi in acute myeloid leukemia: an echocardiographic and autopsy correlation. Echocardiography. 2010 Jan;27(1):E4-8.
- 116. Bhat SP, Moorthy N, Ramalingam R, Jayapal M, **Nanjappa MC**. Angiolymphoid hyperplasia with eosinophilia presenting as a giant axillary artery aneurysm. Vascular. 2010 Jan-Feb;18(1):49-52.
- 117. **Nanjappa MC**, Shankarappa RK, Chandrasekaran D, Moorthy N. Fatal coronary embolism in infective endocarditis associated with chronic rheumatic heart disease: an unexpected transesophageal

- echocardiographic documentation. Echocardiography. 2009 Aug; 26(7):870-2.
- 118. Mohan Rao PS, Moorthy N, Shankarappa RK, Bhat P, **Nanjappa MC**. Giant mediastinal thymolipoma simulating cardiomegaly. J Cardiol. 2009 Oct;54(2):326-9.

PhD Degree Co-Guide:

- 1. Study of Lipid profile, Apo (a), Lp(a) in Health and Disease, Dr.G.Rajeshwari, Bangalore University.24-06-2003.
- 2. Study of Apolipoproteins in Coronary Heart Disease. Dr. Sudharshini Rao, Bangalore University.04-08-2004.
- 3. Study of Insulin resistance in Coronary Artery Disease, A pragmatic Approach. Dr. Shaheena Banu, Rajiv Gandhi University Health Science.13-01-2005.

International Workshops and Conference Attended:

- WHO fellowship Training in Interventional Cardiology at University of Birmingnam ALABAMA, USA.1994.
- Workshop on Interventional Cardiology at University of Charles Nicholas Roven France.1996.
- Atherectomy Workshop Birmingham, USA. 1994.
- European Society of Cardiology Conference, England, 1997
- Angioplasty Workshop at Columbo.2000.
- Madrid interventional Cardiology Spain, 1998
- Australasia Symposium Perth, Australia. 1998
- TCT Washington USA 1999.
- Laser in Cardiology Practice Bangkok. 1999.
- PCR Paris 2005.
- TCT Washington DC 2005.

<u>Live Workshops organized and performance given as primary operator:</u>

- 1. Interventional Cardiology Workshop at Sri Jayadeva Institute Cardiovascular sciences and Research Bangalore year 1996.
- 2. Angioplasty Live workshop Mauritius 2002.
- 3. Mitral Valvuloplasty Live workshop at Medical College, Calicut 2000.
- 4. Mitral Valvuloplasty Live workshop at Post Graduate Institute in Cardiology, Nagpur- 2000.
- 5. Mitral Valvuloplasty Live workshop at B.M.Birla Heart Institute, Kolkata 2000,
- 6. Mitral Valvuloplasty Live workshop at S.S.K.M.Post graduate Institute, Kolkata 2000
- 7. Mitral Valvuloplasty Live workshop at J.J.M.Medical College, Belgaum, 2001.
- 8. Live Mitral Valvuloplasty workshop to Paris France (India Live 2009)
- 9. Live workshop conducted for more than 10-15 National & International Conference

Scientific Abstracts and Papers Presented:

- 1. Echo Correlation of left Atrial Size and Atrial Fibrrillation CSI 1987.
- 2. Clinical, Echocardiographic Evaluation of Hypertrophic Cardiomyopath CSI, 1987.
- 3. Metoprolol in Dilated Cardimyopathy CSI 1987
- 4. Clinical, Echocardiographic Haemodynamic study of TAPVC CSI 1989
- 5. Primary Pulmonary Hypertension CSI 1987 clinical, Echocardiographic study
- 6. Intravenous streptokinase in Acute Myocardial Infarction CSI 1991
- 7. Single Coronary Artery Cases Report CSI
- 8. Myocardial Hydatid Cyst CSI 1990.
- 9. Assessment of Shunt size in Atrial Septal defect by Transatrial Jet width on Colour flow Mapping CSI 1994.
- 10. Study of intravenous Diltiazem in SVT ICC 1994
- 11. Haemodynamic changes following Balloon Mitral Valvuloplasty ICC- 1994
- 12. PTMC in Mitral Resetenosis ICC 1994
- 13. PTMC in Mitral Stenosis Calcification ICC 1994
- 14. Balloon Mitral Valvuloplasty in High Risk Sub Categories CSI 1994
- 15. 1000 cases of Balloon Mitral Valvuloplasty by Inoue and Accura Balloon (800cases)
- 16. Left Atrial Spontaneous Echo Constrast in Mitral Valve Disease by TEE-CSI 1994.
- 17. Pulmonary Venous Flow Assessment by TEE in patients with Mitral Stenosis.
- 18. Mitral Valve Area Estimation by Transmitral Jet width on TEE CSI 1995
- 19. Pulmonary Venous flow Assessment by TEE before and after PTMC
- 20. Comparative study of PALMATZ SCHATZ and WIKTOR CORONARY STENTING CSI 1996.
- 21. Comparative study of PTMC and closed surgical Valvotomy ICC 1994
- 22. Clinical Echocardiography study of Infective Endocardia CSI 1994
- 23. Apolipoproteins in Coronary Artery Disease CSI 1994
- 24. Analysis of left atrial A and V wave in Mitral Stenosis ICC Hyderabad
- 25. Balloon Mitral Valvuloplasty by Modified Meier's Technique ICC 1996- Hyderabad.
- 26. Pattern and Prevalence of Rheumatic Heart Disease by Echocardiographic Evaluation, Indian Heart Journal 1999:51:604 –Nov. 1999
- 27. Transcatheter Closure of Atrial Septal Defect using Self Expandable Amplatzer Septal occluder versus surgical closure A comparative Analysis. Indian Heart Journal 2000; 52:721, Nov- 2000.
- 28. Effect of Coronary Angioplasty on QT interval Dispersion. Indian Heart Journal: 2000; 52:794, Nov-2000.
- 29. QT Dispersion as a Predictor of In-Hospital Ventricular Arrhythmias and Mortality in Acute Myocardial infarction. Indian Heart Journal 2000; 52:808, Nov-2000.
- 30. Transcatheter Closure of Patent Ductus Arteriosus our Experience Indian Heart Journal 2000; 52:810, Nov-2000.
- 31. Multivessel Coronary Angioplasty and Stenting at Sri Jayadeva (Mucass): A Clinical Outcome: Indian Heart Journal 1999:51:604. Nov-Dec, 1999.
- 32. Rescue Angioplasty after Failed Thrombolysis in Acute Myocardial Infarction, Indian Heart Journal 1999; 51:625. Nov-Dec 1999.
- 33. Percutaneous Transluminal Coronary Angioplasty in Women: A Comparative Study, Indian Heart Journal 1999; 51:626, Nov-Dec 1999.

- 34. Percutaneous Transluminal Coronary Angioplasty in Elderly: A comparative study. Indian Heart Journal 1999; 51:650, Nov-Dec 1999.
- 35. Mitral Valvuloplasty in patients Aged 50 years and above. Indian Heart Journal 1999; 51:659, Nov-Dec 1999.
- 36. Emergency PTMC in patients with Rheumatic Mitral Stenosis and Cardiogenic Shock or Cardiac Arrest. Indian Heart Journal 1999; 51:667, Nov-Dec 1999.
- 37. Evaluation of C reactive protein in Coronary Artery Disease and Acute Myocardial Infarction patients. Indian Heart Journal 1999; 51:703, Nov-Dec 1999.
- 38. Intermediate Term Follow-up Results of Percutaneous Transvenous Mitral Commissurotomy. Indian Heart Journal 1999; 51:722, Nov-Dec 1999.
- 39. Percutaneous Balloon Aortic Valvuloplasty in Congenital Aortic Stenosis: Intermediate-Term Follow-up study. Indian Heart Journal 1999; 51:730, Nov-Dec 1999.
- 40. Percutaneous Transvenous Mitral Commissurotomy in Juvenile Rheumatic Mitral Stenosis. Indian Heart Journal 1999; 51:731,Nov-Dec 1999.
- 41. Experience with Small-Vessel Stenting, Indian Heart Journal 2003; 55:443-451, 2003.
- 42. Accelerated Streptokinase: A comparison of 30-min Infusion Versus 60-min Infusion of Streptokinase in Acute Myocardial Infarction. Indian Heart Journal 2003:55; 543-550. 2003.
- 43. Experience with Percutaneous Transvenous Mitral commissurotomy in Mitral Valve Restenosis. Indian Heart Journal 2003; 55:573-578, 2003.
- 44. Accelerated Streptokinase: A Comparison of 30-min infusion versus 60-min Infusion of Streptokinase in Acute Myocardial infarction. Indian Heart Journal: 2003:55; 572-578, 2003.
- 45. Stenting for Symptomatic Myocardial Bridging, Indian Heart Journal: 2003:54; 597-602, 2003.

Professional Experience in Medical field- 23 years experience:

1. Post Graduation in Internal Medicine Bangalore Medical College 1982 - 1985 2. Senior Registrar in Cardiology KMC - Manipal 02-09-1985 to 04-07-1988 3. Lecturer in Cardiology Sri Jayadeva Institute of Cardiology 01-02-1989 to 26-11-1990 4. Assistant Professor of Cardiology Sri Jayadeva Institute of Cardiology 27-10-1990 to 17-04-1996 5. Professor of Cardiology SJICR From 18-04-1996 (14 years As a Professor of Cardiology) 6. Director - SJICR From 1st January 2006

Teaching Experience:

1. Experience in Teaching after Post Graduation - 30 years

2. Experience in the Medical Profession - 34 years

till date

Professional Bodies Attachments:

1. President

2. Hon. Secretary

3. Hon. Editor

4. Editorial Member

5. Advisory Committee Member

6. Scientific Board Advisor

7. Executive Committee Member

8. Member

9. Member

10. Member – Board of Director

11. Trustee

12. Executive Committee Member

 Indian College of Cardiology – 2005-2006

- Indian College of Cardiology,

1997-2003

- Journal of Indian College of

Cardiology 1999-2000

- Indian Heart Journal (1997)

- Indo-French Heart Foundation – 1998 – 99.

- Asia-Pacific – 2002.

- Cardiological Society of India - 2005-06

- Drug Controller of India,

- Medical Council of India

- Yeshaswini Trust

- Vajpayee Arogya Scheme (SAST)

- Cardiological Society of India - 2012-13

Examiner in DM Cardiology:

- 1. Rajiv Gandhi University of Health Sciences, Bangalore, Karnataka
- 2. Kerala University, Thiruvananthapuram, Kerala
- 3. Sree Chitra Tirunal Institute for Medical Sciences & Technology, Thiruvananthapuram, Kerala
- 4. Manipal Academy of Higher Education (Deemed University) Manipal, Karnataka
- 5. University of Kolkatta, West Bengal.
- 6. Bombay University, Mumbai, Maharashtra
- 7. NTR Health university, Vijawada, AP
- 8. Sri Venkateshwara Institute of Medical Sciences, Tirupathi, AP
- 9. SGPGIMS, Lucknow, UP
- 10. JIPMER, Pondicherry
- 11. CMC, Vellore
- 12. Madras Medical College, Chennai.
- 13. Bhuneshwara University, Cuttack.
- 14. Matha Amrutha Institute of Medical Scieces Kerala

Sd/-(DR.C.N.MANJUNATH) DIRECTOR