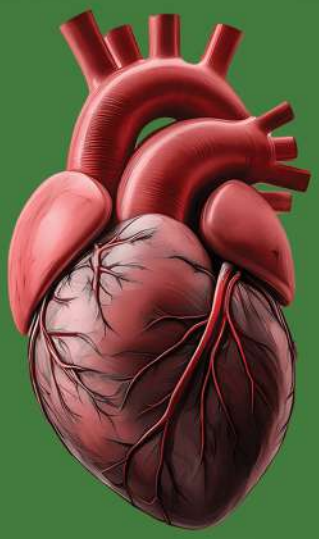
SICVD
SINDH INSTITUTE OF CARDIOVASCULAR DISEASES

THE OFFICIAL NEWSLETTER OF SICVD - 2025 ▌VOL.-1▌ISSUE-1

# Lifeline of Sindh

Connecting Hearts, Saving Lives – Across Every Beat of Sindh



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## EDITORIAL

### FROM THE EDITOR'S DESK

I am delighted to present the inaugural edition of the SICVD Newsletter, marking the beginning of our journey to share advancements and achievements in the field of cardiology. This newsletter aims to highlight the academic endeavors within our institution, encompassing various disciplines such as Cardiac Surgery, Cardiac Anesthesia, Cardiac Imaging, Emergency Medicine, Electrophysiology, Pediatric Cardiology, Laboratory Services, Critical Care, and Infectious Diseases.

SICVD'S unwavering commitment to providing hope and care for countless patients is strongly endorsed by heartfelt message from **Honorable minster for Health and population Dr. Azra Fazal Pechuho** which is featured in this first edition.Her words resonate with our mission and inspire us to continue striving for excellence in cardiac care.

I wish to extend my sincere appreciation to Executive Director SICVD for his steadfast support in publishing this issue the members of editorial board for their tireless efforts in compiling and refining the content of this publication and to our Publishing Manager for his work in designing and producing this issue.

As we move forward, we will remain focus on strengthening our services, expanding our outreach, and fostering partnerships to improve health outcomes for all.

The SICVD Newsletter is a platform for us to share knowledge, experiences, and achievements in different specialties as mentioned above. We look forward to continuing this journey and exploring the advancements in our fields.

I invite your valuable feedback and suggestions to further enhance our newsletter.

**Prof. Amin M. Khuwaja**
Editor-in-Chie |**Email ID: sicvdnewsletter@gmail.com**

**Disclaimer:**
The editorial board is not responsible for the information and views incorporated in this newsletter. The articles are contributed by individuals and departments. The information regarding certain diseases does not serve as medical advice and person suffering from one of such diseases should contact a qualified physician.

## Dr. Azra Fazal Pechuho

Minister for Health & Population Welfare Department,
Chairperson, Governing Body, SICVD

It is a pleasure to extend my heartfelt congratulations to the Sindh Institute of Cardiovascular Diseases (SICVD) on the launch of its inaugural newsletter, "Life Line of Sindh." This initiative reflects a commendable effort to keep the public informed about critical issues in cardiovascular health, ongoing innovations, and the impactful work being carried out across the SICVD Network.

As the Chairperson of SICVD's Governing Body, I have had the privilege to witness the remarkable dedication and commitment of the institute's leadership and staff. The transformation of SICVD into a province-wide network, comprising **10 state-of-the-art cardiac hospitals and 29 fully operational Chest Pain Units** from Karachi to Kashmore, is a testament to the vision and resolve of the Government of Sindh to bring quality healthcare to the doorstep of every citizen.

The provision of free, high-quality services, including pediatric cardiac care, life-saving stroke interventions, open heart surgeries and advanced cardiac interventions, continues to change lives and set new benchmarks in public healthcare.

Initiatives like ***"Life Line of Sindh"*** play a vital role in enhancing awareness, educating communities, and showcasing the progress of SICVD Network committed to excellence. I applaud the SICVD team for their tireless efforts and visionary approach in making this publication a reality.

I extend my best wishes to the editorial team and the entire institution for continued success in this important endeavor.

## Prof. Jawaid Akbar Sial

Executive Director, SICVD

It is with great pride and joy that I present the first official newsletter of the Sindh Institute of Cardiovascular Diseases (SICVD), titled "Lifeline of Sindh.". This milestone reflects our unwavering mission to provide free, world-class cardiac care to the people of Sindh.

Over the years, SICVD has grown into one of the largest public sector cardiac healthcare networks in the world. With the generous support of the Government of Sindh, we have established 10 state-of-the-art cardiac hospitals and 29 Chest Pain Units across the province, ensuring that no patient is left without access to timely treatment. We also take pride in pioneering stroke treatment services at SICVD Sukkur and SICVD Tando Muhammad Khan, offering life-saving interventions absolutely free of cost.

This newsletter will highlight our progress, initiatives, and patient stories, keeping our community connected with the strides we are making in cardiovascular and stroke care. It is a platform to showcase the dedication of our doctors, nurses, paramedics, and administrative teams who serve with commitment and compassion every day.

I would also like to express my deepest gratitude to the **Honorable Health Minister of Sindh, Dr. Azra Fazal Pechuho** for her kind words and support on the occasion of SICVD's first newsletter. Her encouragement strengthens our resolve to continue our journey of excellence in healthcare.

As we launch this inaugural edition, I look forward to sharing more achievements and innovations in the future. Together, with the continued support of our government and community, SICVD will remain a beacon of hope, saving lives and building a healthier Sindh.

## Dr. Muhammad Moosa

Chief Operating Officer

It gives me immense pride to share the remarkable journey of the Sindh Institute of Cardiovascular Diseases (SICVD) Network, a journey that began with a vision to transform cardiac care in Sindh and has today become a reality that touches millions of lives across the province.

Since 2017, SICVD, with the unwavering support of the Government of Sindh, has pioneered state-of-the-art, free-of-cost cardiac healthcare services for the people of Sindh. What once seemed an ambitious dream is now a thriving reality, as advanced cardiac hospitals and Chest Pain Units (CPUs) bring life-saving care directly to the doorsteps of our communities.

Communities in rural and remote regions, whether in the deserts of Mithi, the bustling towns of Larkano and Sukkur, or the coastal areas of Thatta, no longer need to undertake long, exhausting, and costly journeys to urban centers for specialized treatment. Through the establishment of 10 full-fledged cardiac hospitals in Larkano, Sukkur, Khairpur, Nawabshah, Sehwan, Hyderabad, Tando Muhammad Khan, Mithi, Baldia Town, and Lyari, SICVD has ensured that every citizen has equitable access to advanced cardiac care, regardless of geography or financial means.

Complementing these hospitals, our **Chest Pain Unit Program** has truly revolutionized emergency cardiac care. Starting with a simple yet powerful idea of bringing treatment closer to patients in Karachi, through CPUs set up under flyovers and in densely populated areas, the program has grown into a network of **19 CPUs in Karachi** and **10** more in the other cities of the province such as Kashmore, Jacobabad, Shikarpur, Mirpurkhas, Umerkot, and Badin.

These units provide immediate interventions for chest pain and heart attacks, stabilizing patients in critical moments and saving countless lives.

SICVD's innovative Chest Pain Unit (CPU) Program, launched in 2017, gained international recognition when it was presented at the **75th Annual American College of Cardiology** Meeting in Atlanta, the world's largest gathering of cardiovascular specialists. The program received wide appreciation from the global cardiology community, with leading experts praising it as a pioneering model for providing timely cardiac care in resource-limited settings.

Many recommended the CPU initiative as a replicable solution for countries facing similar healthcare challenges, reaffirming SICVD's role as a global leader in cardiac innovation.

In addition to cardiac care, SICVD has also expanded its services to address another critical health challenge that is stroke intervention. This program has already been launched successfully at SICVD Tando Muhammad Khan and SICVD Sukkur, providing patients with timely, advanced treatment that significantly improves outcomes. Very soon, this service will also be available at SICVD Shaheed Benazirabad, further strengthening our commitment to comprehensive cardiovascular and stroke care across the province.

Beyond patient care, SICVD is also shaping the future of cardiac healthcare by investing in research, training, and professional development. We are equipping the next generation of cardiologists, surgeons, nurses, and healthcare professionals with the skills to sustain and advance this legacy of excellence.

None of this would have been possible without the visionary leadership and steadfast support of the Government of Sindh and the Health Department. Their commitment has empowered SICVD to remove financial barriers to treatment and to operate without a payment counter in any of our hospitals, making cardiac care a right for all, not a privilege for a few.

As Chief Operating Officer, I extend my deepest gratitude to our dedicated faculty, doctors, nurses, and staff whose tireless efforts keep this mission alive every day. Their compassion, professionalism, and unwavering service have placed SICVD among the leading cardiac care networks not just in Pakistan, but globally.

Looking ahead, we remain committed to expanding our reach, innovating in care delivery, and ensuring that every patient in Sindh, whether in Karachi or Kashmore, can access world-class, free cardiac and stroke treatment at the moment they need it most. Together, with the continued support of Sindh Government, our partners and stakeholders, we are not just treating hearts, but also instilling hope and saving futures.

# SICVD SIGNS HISTORIC MOU TO IMPROVE MATERNAL HEALTH IN SINDH

In a landmark step towards reducing maternal mortality and safeguarding the health of mothers across Sindh, the **Sindh Institute of Cardiovascular Diseases (SICVD)** has signed a **Memorandum of Understanding (MoU)** with the **Sindh Maternal Mortality Task Force.**

The strategic partnership, inked at a dignified ceremony, will enhance collaboration with tertiary care hospitals across the province to provide specialized cardiac care for women during their reproductive phase, ensuring better maternal outcomes.

The MoU was formally signed by **Prof. Jawaid Akbar Sial** (Executive Director, SICVD) and **Prof. Nusrat Shah** (Vice Chancellor, SMBBMU Larkana) in the esteemed presence of **Dr. Azra Fazal Pechuho** (Minister for Health & Population Welfare, Sindh).

**Highlights of the Agreement:**

- Specialized cardiac care services for women during pregnancy and reproductive years
- Training programs for postgraduates in **cardio-obstetrics**
- Establishment of **cardio-obstetrics units** at all tertiary care hospitals in Sindh
- Provision of **contraceptive support for cardiac mothers**

The ceremony was also attended by eminent personalities, including **Prof. Tahir Saghir** (Executive Director, NICVD) and **Prof. Nighat Shah** (Founding GS, Sindh Maternal Mortality Task Force), alongside distinguished representatives from LUMHS, PUMHS, and SMBBMU.

Speaking at the event, the leadership reaffirmed their shared vision of **saving lives and reducing preventable maternal deaths** through integrated efforts in cardio-obstetrics. This historic collaboration represents a pivotal moment in improving maternal health services in Sindh, reflecting SICVD's mission to extend life-saving care beyond cardiac patients to vulnerable mothers in need.

**Abdul Nasir**
Head of Marketing
NICVD/SICVD

# SICVD TANDO MUHAMMAD KHAN: A LEADING CARDIAC CARE CENTER

The Sindh Institute of Cardiovascular Diseases (SICVD) in Tando Muhammad Khan is solidifying its position as a premier cardiac care center in the region. With a comprehensive range of services, including primary percutaneous coronary intervention (PCI), pediatric cardiology, pediatric cardiac surgery, electrophysiology procedures, and pacemaker implantations, SICVD Tando Muhammad Khan is committed to providing state-of-the-art cardiac care.

**Recent Advancements**

• New Cardiac Surgery Theatre: The institution has inaugurated a new, state-of-the-art cardiac surgery theater, doubling its surgical capacity to two fully operational theaters. This expansion enables the center to handle a higher volume of complex cardiac surgeries, reducing waiting times and improving patient outcomes.
• Central Sterile Services Department (CSSD): SICVD Tando Muhammad Khan has established a new CSSD, ensuring meticulous cleaning, disinfection, and sterilization of surgical instruments and medical devices according to international standards. This investment enhances patient safety and reduces the risk of healthcare associated infections.

Inauguration of both CSSD and Cardiac surgery operating room were done by the honorable MNA Mr. Naveed qamar and was attended by Prof. Nadeem qamar Ex Executive Director NICVD and senior faculty memmbers.and host of the event were Executive Director SICVD Prof Jawaid Akbar Sial, and Dr Ghazanfar Ali Shah

**Comprehensive Cardiac Services**

• Primary PCI: SICVD Tando Muhammad Khan provides immediate, life-saving interventions for acute heart attacks.
• Electrophysiology Services: The center offers diagnosis and treatment for complex heart rhythm disorders.
• Pacemaker Implantations: SICVD Tando Muhammad Khan provides crucial support for patients with slow heart rates.
• Pediatric Cardiology: The institution offers diagnostic, invasive, and non-invasive services for children with heart conditions.

**Shaping the Future of Cardiac Care**

With its recent advancements, SICVD Tando Muhammad Khan is not only treating heart conditions but also shaping the future of cardiac care in the region. The center's commitment to providing comprehensive, state-of-the-art cardiac services has solidified its reputation as a truly tertiary care cardiac institution

**Dr. Ghazanfer Ali Shah.**
Associate Professor
Intervention cardiology
SICVD Tando Muhammad Khan

# FROM KARACHI TO KASHMORE: SICVD NETWORK MARKS PAKISTAN'S 78TH INDEPENDENCE DAY WITH ZEAL

The Sindh Institute of Cardiovascular Diseases (SICVD) Network celebrated Pakistan's 78th Independence Day with great enthusiasm and national spirit across all its hospitals and Chest Pain Units throughout Sindh, from Karachi to Kashmore.

The festivities were observed at SICVD centers in Karachi, Hyderabad, Tando Muhammad Khan, Mithi, Sehwan, Nawabshah, Larkano, Khairpur, Sukkur, Lyari and all CPUs where doctors, nurses, paramedics, and staff joined hands in a vibrant display of unity and patriotism.

**Celebrations Across the Network:**

The Independence Day activities featured:

- Flag-hoisting ceremonies at all centers
- National songs and cultural performances by staff and local communities
- Tree plantation drives promoting a greener and healthier Pakistan

At the heart of the commemorations was the main flag-hoisting ceremony at SICVD Baldia Town, Karachi, led by **Prof. Jawaid Akbar Sial** (Executive Director, SICVD).

Speaking on the occasion, Prof. Sial emphasized that just as the struggle for independence was rooted in sacrifice and service, SICVD continues that mission today by offering free, accessible, and world-class cardiac care to the people of Sindh and Pakistan.

**A Commitment Beyond Healthcare:**

Through every heartbeat saved and every life touched, the SICVD Network reaffirms its unwavering commitment to the health, prosperity, and well-being of the nation.

This Independence Day celebration was not only a tribute to Pakistan's glorious past but also a reaffirmation of SICVD's vision for a healthier, stronger, and united future.

**Abdul Nasir**
Head of Marketing
NICVD/SICVD

# CASE REPORT: ACUTE CORONARY SYNDROME IN A CHILD WITH FAMILIAL HYPERCHOLESTEROLEMIA

## Introduction

Familial hypercholesterolemia is a genetic disorder characterized by elevated low-density lipoprotein (LDL) levels, leading to premature cardiovascular disease. We present a case of a 9-year-old girl with familial hypercholesterolemia and acute coronary syndrome.

## Case Presentation

A 9-year-old girl presented with intermittent left-sided chest pain, anxiety, and tachycardia. Physical examination revealed tendon xanthomas on her knees and elbows. Family history was notable for similar skin deposits in two siblings.

## Investigations

- Lipid profile: Cholesterol 848 mg/dl, LDL 806 mg/dl
- Cardiac enzymes: Normal
- ECG: Sinus tachycardia, nonspecific ST-T changes
- Echocardiography: Moderate aortic stenosis, dilated left ventricle with severe dysfunction (LVEF 33%)
- Cardiac CT angiography: Multiple stenotic lesions in RCA and left coronary artery bifurcation

## Management

The patient was treated with diuretics, milrinone, dobutamine, oral lipid-lowering agents, aspirin, and clopidogrel, along with dietary advice. After 10 days of treatment, her condition improved, and she was discharged home safely with regular follow-up and medication.

## Conclusion

Prompt detection and treatment of acute coronary syndrome in children with familial hypercholesterolemia can significantly reduce morbidity and mortality. Lifestyle modification and oral statins play a crucial role in managing this condition. Early diagnosis and intervention are essential to prevent long-term cardiovascular complications.

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**Dr. Ramchand**
Associate Professor
Pediatric Cardiology
SICVD, Sukkur

## LIPID PROFILE: A CRITICAL COMPONENT OF CARDIOVASCULAR RISK ASSESSMENT

The lipid profile, a comprehensive assessment of an individual's lipid metabolism, plays a pivotal role in cardiovascular risk stratification. This panel of tests, including low density lipoprotein cholesterol (LDL-C), high density lipoprotein cholesterol (HDL-C), and triglycerides, provide valuable insights into the complex interplay between lipid metabolism and atherosclerotic cardiovascular disease (ASCVD). Cardiovascular disease (CVD) due to atherosclerosis of the arterial vessel wall and to thrombosis is the foremost cause of premature mortality and of disability-adjusted life years (DALYs), increasingly common in developing countries.

**The Role of Lipid Profile in ASCVD Risk Assessment:**

The lipid profile is an integral component of ASCVD risk assessment, as it helps identify individuals with Dyslipidemia, a key modifiable risk factor for cardiovascular disease. Elevated levels of LDL-C can lead to the accumulation of cholesterol-rich lipids in the arterial wall, promoting plaque formation and instability. Conversely, HDL-C has anti atherogenic properties, including reverse cholesterol transport and anti-inflammatory effects.

**Clinical Implications of Lipid Profile Testing:**

Lipid profile testing has significant clinical implications, guiding the management of dyslipidemia and ASCVD risk reduction. By identifying individuals at high risk of ASCVD, to initiate targeted interventions, including lifestyle modifications and pharmacological therapies. Statins, ezetimibe, and PCSK9 inhibitors are among the therapeutic options available to reduce LDL-C levels and mitigate cardiovascular risk.

**Statins:** High intensity statin therapy is recommended for individuals with clinical atherosclerotic cardiovascular disease and those with severe primary hypercholesterolemia (LDL-C ≥ 190MG/DL).

Non-statin medications: In very high risk ASCVD patients, adding non-statin therapies like ezetimide or PCSK9 inhibitors to statin therapy may be considered to further lower LDL-C.

**Specific Recommendations for Different Groups:**

Individuals with Clinical ASCVD: High intensity statin therapy is recommended regardless of risk level.

Individuals with Diabetes: Moderate-intensity statin therapy is recommended for those with diabetes and LDL-C ≥70 mg/dL (≥1.8 mmol/L).

Primary Prevention: Individuals aged 40-75 with LDL-C ≥70 mg/dL (≥1.8 mmol/L) and a 10-year ASCVD risk of ≥7.5% should be evaluated for statin therapy after a discussion of treatment options

**Emerging Lipid Biomarkers:**

Emerging lipid biomarkers, such as apolipoprotein B and lipoprotein (a), may provide additional insights into ASCVD risk. These biomarkers have been shown to be associated with increased cardiovascular risk, independent of traditional lipid parameters. Further research is needed to fully elucidate their role in cardiovascular risk assessment.

**Conclusion:**

In conclusion, the lipid profile remains a cornerstone of cardiovascular risk assessment, providing valuable insights into the complex interplay between lipid metabolism and ASCVD. By understanding the nuances of lipid profile testing and interpretation, cardiologists can optimize dyslipidemia management and reduce the burden of ASCVD. As our understanding of lipid metabolism and cardiovascular disease continues to evolve, it is essential to stay up-to-date with the latest research and guidelines to provide the best possible care for our patients.

**References:**

• American College of Cardiology/American Heart Association guidelines for the management of cholesterol.
• European Society of Cardiology/European Atherosclerosis Society guidelines for the management of dyslipidemias.

**Dr. Aisha Mahesar**
Assistant Professor
Consultant Pathologist
SICVD, Sukkur

# ADVANCING CARDIAC EMERGENCY CARE: CPR TRAINING FOR NURSES ACROSS SINDH

In a major step toward strengthening emergency cardiac care services across Sindh, the National Institute of Cardiovascular Diseases (NICVD) in collaboration with the Sindh Institute of Cardiovascular Diseases (SICVD) successfully organized a comprehensive two-day Cardiopulmonary Resuscitation (CPR) training workshop.

The intensive program, held at the SICVD Satellite Center in Tando Muhammad Khan, brought together nursing professionals not only from the host facility but also from several Chest Pain Units (CPUs) and satellite centers located in Mithi, Umerkot, Tando Bago, Mirpurkhas, Tando Allahyar, and Hyderabad.

Designed with a dual focus on enhancing cognitive knowledge and strengthening psychomotor skills, the workshop ensured that participants were equipped with both theoretical understanding and practical expertise to act swiftly and effectively in cardiac emergencies. Nurses actively participated throughout the sessions, and the initiative received high appreciation for its relevance and impact.

Speaking on the occasion, the faculty highlighted the institution's ongoing commitment to professional development and training and said both are the cornerstones of exceptional nursing. This is just the beginning. We are committed to reaching every corner of Sindh to empower our nurses. This mission is central to our ultimate goal promoting the highest standards of quality care for our patients.

The workshop marks milestone in NICVD & SICVD's mission to advance cardiac care and ensure timely, life-saving interventions across the province.

**Ms. Shamsa Samani**
Director Nursing
NICVD & SICVD

# SICVD BALDIA KARACHI CENTRE – A COMPREHENSIVE HUB FOR CARDIAC EXCELLENCE

The Sindh Institute of Cardiovascular Diseases (SICVD) Baldia, a 100 bed hospital in Karachi, has made significant strides in cardiovascular care since its Cath Lab commenced operations on April 22, 2025. Strategically located to serve patients from various parts of Karachi and Baluchistan, SICVD Baldia has established itself as a trusted healthcare provider.

**Key Highlights**

Total Procedures: 825 procedures performed, including:
Left Heart Caths: 240 cases
Primary PCI cases: 341 cases, highlighting the importance of timely treatment for acute coronary syndrome (ACS)
Early Invasive PCI cases: 244 cases, demonstrating expertise in managing critical situations
Mortality Rate: A low mortality rate of 1.02% showcases the team's commitment to excellence and ability to work together seamlessly
High Risk Patients: 2.3% of Primary PCI patients were in Killip Class III or IV, indicating the team's capability in managing complex cases

**Quality Improvement Initiatives**

The SICVD Baldia team recognizes the importance of ongoing data analysis and quality improvement initiatives to refine care pathways and achieve better results.

**Conclusion**

The data from SICVD Baldia's PCI procedures reflects a promising start, with the team demonstrating expertise and dedication to providing high quality care. As the hospital continues to build momentum, it looks forward to contributing to the advancement of cardiovascular care in the region

**Dr. Iftikhar Ahmed**
Associate Professor of Cardiology
Incharge SICVD Baldia

# A RARE LETHRAL NEONATAL CASE REPORT OF ECTOPIC CARDIACS


**Abstract**

Ectopia cordis is a rare congenital malformation characterized by the heart's partial or complete protrusion outside the thoracic cavity. This condition occurs due to the failure of midline mesoderm maturation and ventral body formation during embryogenesis, with an estimated incidence of 5.5 to 7.9 per million live births. The prognosis for infants with ectopia cordis is generally poor. This article reports the first documented case of ectopia cordis at the Pediatric Cardiology Ward of SICVD, Sukkur.


**Case Presentation**

A one-day-old newborn, delivered via emergency cesarean section due to fetal distress, presented with respiratory distress. The baby's birth weight was 2.2 kilograms, and the Apgar score was 7 at 1 minute and 9 at 5 minutes. Physical examination revealed a heart completely externalized from the chest without pericardial protection.

**Investigation and Management**

The mother had no history of medication use, illicit drugs, or chronic illness during pregnancy. However, there was a history of first-degree consanguinity marriage. After initial stabilization, bedside echocardiography showed a patent foramen ovale (PFO) with left-to-right shunts, and hematological reports were normal. Unfortunately, surgical intervention was not possible due to the small thoracic cavity volume.

**Conclusion**

Managing ectopia cordis poses a significant challenge due to its rarity. Early diagnosis allows for consideration of pregnancy termination, while late diagnosis requires a multidisciplinary approach and experienced pediatric surgical expertise to improve prognosis. This case highlights the need for prompt and specialized care to address the complexities associated with ectopia cordis.

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**Dr. Ramchand**
Associate Professor
Pediatric Cardiology
SICVD, Sukkur

# EMERGENCY DEPARTMENT, TRIAGE & MEDICAL ICU A MILESTONE IN PATIENT CARE AT SICVD HYDERABAD

The Sindh Institute of Cardiovascular Diseases (SICVD) Hyderabad has taken a significant step forward in patient care with the launch of its new 26-bedded Emergency Department and a dedicated 8-bedded Medical Intensive Care Unit (MICU).

**Emergency Department**

• State-of-the-Art Facility: The Emergency Department is fully operational and equipped to meet the highest standards of acute care.
• Modern Triage Protocols: The facility incorporates advanced monitoring systems and specialized cardiac emergency capabilities, ensuring rapid diagnosis and treatment for patients with life-threatening conditions.
• Inauguration: The department was officially inaugurated on July 8th by Prof. Dr. Jawaid Akbar Sial, Executive Director of SICVD, along with distinguished faculty and senior staff.

**Medical Intensive Care Unit (MICU)**

• Dedicated Care: The MICU is fully equipped with cutting-edge technology and staffed by highly trained medical and nursing teams.
• Hemodialysis Facilities: Two beds are specifically allocated for hemodialysis, ensuring critically ill patients with renal complications receive immediate care.
• Advanced Monitoring: The MICU provides continuous monitoring facilities, enabling healthcare professionals to respond promptly to patients' needs.

**Commitment to Excellence**

The launch of the new Emergency Department and MICU marks a major milestone in SICVD Hyderabad's mission to deliver comprehensive, patient-centered, and technologically advanced healthcare. With these expanded capabilities, the institution is better equipped to serve the community with compassion, speed, and clinical excellence.

**Dr Altaf Hussain Gajoo**
Associate Professor of Cardiology
Incharge
SICVD HYDERABAD

# PROMISE OF A BRIGHTER FUTURE, DEPARTMENT OF CARDIAC SURGERY SICVD LARKANA

The Department of Cardiac Surgery at SICVD Larkana has revolutionized cardiac care in the region, providing advanced and complex surgical procedures entirely free of charge through government facilities. Since performing its first open-heart surgery on December 2, 2018, the department has established itself as a hub for comprehensive cardiac care.

**Comprehensive Range of Surgeries**

The department offers a wide range of cardiac surgeries, including:
- Pericardiectomy
- Congenital heart defect repairs
- Cardiac tumor excision
- Coronary artery bypass grafting (CABG)
- Off-pump coronary artery bypass (OPCAB)
- Valve replacement surgeries (MVR, AVR)
- Combined surgeries (CABG+MVR, CABG+ASD, or CABG+AVR)

**State-of-the-Art Facilities**

The department is equipped with:
- Modular Operating Theatres
- State-of-the-art Surgical ICU
- In-hospital laboratory and radiology services
- Physiotherapy and pharmacy services

**Mission and Commitment**

SICVD Larkana is committed to delivering world-class cardiac care to underserved communities. The center aims to:
- Expand its capacity
- Train local talent
- Enhance patient safety and outcomes

By providing advanced cardiac care services, SICVD Larkana is bridging the gap in healthcare access and promoting a brighter future for the region.

**Dr. Kashif Zia**
Assistant Professor
Cardiac Surgery
SICVD, Larkana

**Dr. Iftkhar shah**
Assistant Professor
Anesthesia
SICVD, Larkana

**Dr. Abida Iqbal Kalwar**
Senior Registrar
Cardiac surgery
SICVD, Larkana

# THE NOVELTY OF CARDIAC IMPLANTABLE ELECTRONIC DEVICES: THE LEGACY OF ADVANCEMENT.

**Introduction:**

As a technology introduced as recently as in 1958, it is a testament of its importance that these lifesaving devices have undergone such major advancements as to render them completely unrecognizable from the time they were first introduced, yet they continue to evolve.
From treatment of bradyarrhythmia with pacemakers, to intracardiac cardioverter defibrillator for tachyarrhythmias, and the cardiac resynchronization therapy for heart failure the most noteworthy advancements have made these devices more user friendly both for the patient and the cardiologist, and have opened a wide stream of options for a tailored approach.
The recent advancements under discussion are not limited to but include:

**Bradycardia pacemakers:**

Bradycardia at presentation can be due to Sinus node dysfunction, second degree AV blocks, high degree AV blocks, and complete heart block. The dual chamber pacemaker in these patients prevents pacemaker syndrome. The insertion of pacemaker for these indications is associated with various pacemaker pocket or lead related complications in one of five pacemaker recipients at five years with technological advancement a leadless pacemaker was developed with a pulse generator and an electrode in a single unit which is inserted via the percutaneous, transvenous approach directly into the RV.
With the introduction of accelerometer based sensor software, the scope of the leadless pacemaker implantation has broadened to include greater precision in monitoring although its usage is limited to patients with infrequent pacing requirement.
Leadless pacemakers eliminate the transvenous route from generator to the myocardium, thereby lowering the risk of complications. Implanted via the femoral vein these small devices attach directly to the right ventricular myocardium.

While initial leadless pacemakers were limited to right ventricular pacing, newer versions can sense atrial contraction, providing atrioventricular synchrony. Dual chamber leadless pacemakers are currently in development. Studies have shown that leadless pacemakers have a high implant success rate and low serious adverse event rate. The Micra Transcatheter Pacing Study showed a 51% reduction in complications compared to traditional pacemakers during the first six months.

The risk of infection with leadless pacemakers is significantly lower.
A three year analysis of the Micra CED Study reported an infection risk of less than 0.2%. This is of particular advantage for all immunocompromised patients with frequent procedural manipulation such as those undergoing hemodialysis, leadless pacemakers provide the additional advantage of reduced risk of infection.

Although a fairly new technology with long term outcomes still awaited the promising role of leadless pacemakers in eliminating lead related complications such as fracture, dislodgement, tricuspid regurgitation, or in rare instances vessel related complications cannot be ignored.
Although the risk of electromagnetic interference is not obliterated but leadless pacemakers provide a theoretical advantage to traditional pacemakers in terms of minimizing interference. This however is being explored and evaluation of its impact need to be assessed before implementing it in surgical guidelines.

His bundle pacing and left bundle branch area pacing fall under the umbrella term of conduction system pacing. His bundle pacing has been a revolutionary step in the era of physiologic pacing with a demonstrated benefit of decreased heart failure related hospitalizations versus conventional right ventricular pacing, most noticeable in patients with greater than 20% pacing requirements.

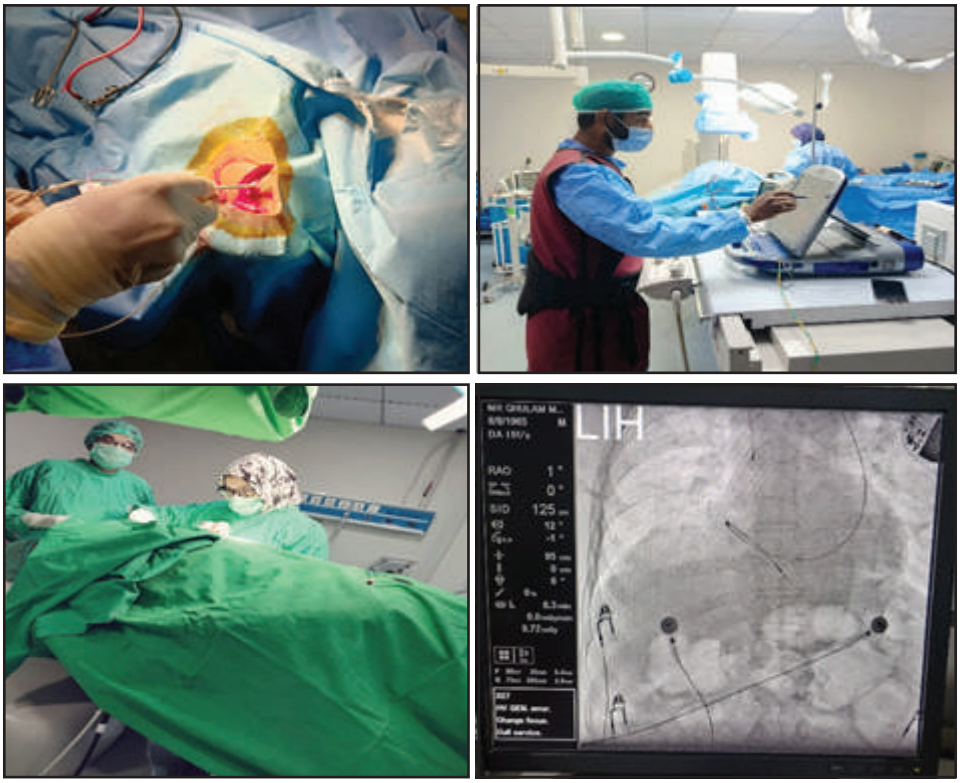
In contrast to conventional RV pacing which can lead to asynchronous ventricular contraction and resultant cardiac remodeling conduction system pacing provides better conduction through physiologic course of stimulation leading to a decline in heart failure related complications.

His bundle pacing in particular and left bundle branch pacing to an extent lead to a shorter QRS duration with improved synchronization of contraction leading to an improvement of LVEF greater than biventricular pacing, resulting in improved clinical functional class, reduced need for hospitalization and decrease in mortality.

His bundle pacing has demonstrated improved outcomes in patients who were implanted CRT device but did not show improvement, in patients' with LBBB left bundle branch pacing has shown improved outcomes and lower pacing thresholds, lower lead revision rate and shorter fluoroscopy time.

In patients with heart failure with preserved ejection fraction and in patients with permanent atrial fibrillation His bundle pacing offers distinct advantage of improvement in heart function and LBBAP prevents reverse remodeling of left atrium respectively.

While HBP and LBBP offer many advantages, they are also associated with technical challenges and potential complications that should be considered when choosing a pacing strategy. Further research is needed to fully establish the long term benefits and safety profiles of this technique.




**Dr. Kubra**
Assistant Professor
Electrophysiology
SICVD, Hyderabad

# SAVING BRAINS, SAVING LIVES: STROKE INTERVENTIONS AT SICVD SUKKUR – A DATA INSIGHT

**Stroke Care at SICVD Sukkur – A Journey of Timely Intervention and Lives Saved**

Stroke remains one of the leading causes of death and disability worldwide. In acute ischemic stroke, "time is brain"—every passing minute without treatment results in irreversible brain cell loss. At SICVD Sukkur, our dedicated stroke program has been providing cutting-edge interventions, ensuring that patients receive life-saving treatment within the golden window.

**Data Overview (as of 23rd June 2025)**

Since the inception of our program, SICVD Sukkur has successfully performed 190 acute stroke interventions. These procedures include:
Intravenous Thrombolysis (tPA) Alone: 144 cases
Mechanical Thrombectomy (MT) Alone: 36 cases

**Combined MT + tPA: 19 cases**

This translates to a total of 163 patients receiving tPA and 55 patients undergoing MT, reflecting our commitment to offering both pharmacological and advanced endovascular therapies depending on clinical indication.

**Impact and Outcomes**

The timely administration of tPA (tissue plasminogen activator) has led to significant neurological recovery in many patients, with several being discharged with minimal or no disability. Mechanical thrombectomy, a highly specialized procedure available at SICVD Sukkur, has been a game - changer for patients with large vessel occlusions, where clot retrieval can restore circulation and function even in severe cases.

Patients who received both MT and tPA demonstrated particularly promising results—benefiting from the combined effect of early pharmacological clot dissolution and definitive mechanical removal.

Our multidisciplinary approach—neurologists, interventional specialists, emergency physicians, and trained nursing staff—ensures rapid diagnosis through advanced imaging, accurate selection for intervention, and comprehensive post-procedure care.

**Real Stories, Real Impact**

Among our many success cases is a 56-year-old patient from a remote village in interior Sindh, who arrived within 2 hours of symptom onset with sudden weakness on one side and slurred speech. Rapid CT imaging revealed a large vessel blockage. The patient received tPA promptly and was immediately shifted for mechanical thrombectomy. Within hours, strength and speech began to improve, and the patient walked out of the hospital a few days later—returning home without significant disability.

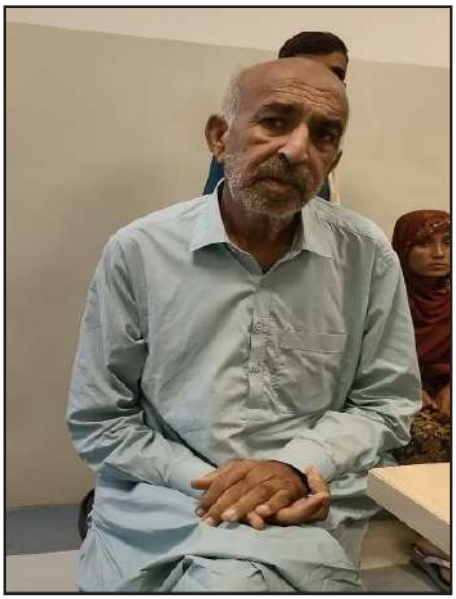
Such stories are not isolated—they represent the daily impact SICVD Sukkur's stroke program has on our community, especially for patients who previously had to travel long distances to Karachi for such specialized care.

**Commitment to the Community**

Our stroke services are designed to be accessible, affordable, and high-quality. Every patient receives emergency neuroimaging, expert assessment, and timely treatment, following the latest international stroke guidelines.

With 190 interventions completed and counting, SICVD Sukkur continues to stand as a beacon of hope for stroke patients in upper Sindh and adjoining areas. Our vision is to further expand capacity, enhance public awareness on recognizing stroke symptoms early, and strengthen our rehabilitation services to ensure better quality of life for survivors.

Because every minute matters—and every life matters.



**Dr. Jawaid Khursheed Shaikh**
Associate Professor
SICVD, Sukkur

# SYMBOL OF OPTIMISM SICVD KHAIRPUR

The year 2024 marked a significant period of growth, service, and dedication at the Interventional Cardiology Department of SICVD Khairpur. The department has continued to provide round the clock, lifesaving cardiac services to the people of interior Sindh.

Our **24/7 Primary Angioplasty** services have remained fully operational throughout the year, allowing us to manage acute coronary syndromes efficiently. In addition, early invasive and elective angioplasties have been routinely performed, reflecting our commitment to international standards of cardiac care.

We proudly operate a compact 26 bedded unit, including a 16 bedded Coronary Care Unit (CCU) and a 10 bedded Emergency Room (ER), providing critical care support to cardiac patients at all times. **In 2024, our Catheterization Laboratory performed approximately total 1807 angioplasties comprising of 693 primary angioplasties, and 1114 early invasive Angioplasties with mortality of 0.99%,** a testament to our team's dedication and patient trust.

Our Echocardiography Department also showed remarkable output with **4035 echocardiograms, including both adult 2877 and paediatric 1158 cases.** The total number of admissions in our ER and CCU collectively reached **3000 patients,** highlighting the region's reliance on our specialized cardiac care services.

Looking to the future, we are excited to announce that the construction of our new state of the art hospital building is nearing completion. This expansion represents a major milestone and will soon house:

A fully equipped Cardiac Surgery Department
A modern Electrophysiology (EP) Unit
A dedicated Paediatric Cardiology Department

With these additions, SICVD Khairpur aims to become a comprehensive tertiary cardiac care centre, further expanding our services and strengthening our role as a beacon of hope for cardiac patients in Sindh.

We thank all our staff, supporters, and patients for placing their trust in us and look forward to continuing our mission of saving hearts and lives with even greater energy in 2025.

**Dr. Sarfraz Hussain Sahito**
Associate Professor
Consultant Cardiologist
SICVD, Khairpur

# SOURCE OF INSPIRATION SICVD, NAWABSHAH

The Sindh Institute of Cardiovascular Diseases (SICVD) Nawabshah serves as a highlights the provision of cutting edge, comprehensive, and entirely free cardiac care for individuals in the Shaheed Benazirabad (Nawabshah) district and surrounding regions. As a satellite facility of SICVD Karachi, it boasts modern amenities and upholds the same exemplary protocols and practices.

The Services it provides are,

**Primary PCI facility 24/7.**

One of its most vital services is the round the clock availability of Primary Percutaneous Coronary Intervention (Primary PCI) for patients experiencing acute ST-elevation myocardial infarction (STEMI). This essential service guarantees prompt care for heart attacks, significantly lowering the risk of complications and mortality. The center also offers complete management for all varieties of Acute Coronary Syndromes (ACS), such as unstable angina, NSTEMI, and STEMI, provided by a team of experienced interventional cardiologists and well trained personnel.

**Adult and pediatric OPD**

The facility operates fully equipped Adult and Pediatric Cardiology outpatient departments every day, serving a diverse array of cardiac ailments for all age groups.

**Adult and pediatric echo**

The diagnostic services at SICVD Nawabshah are also highly effective. The center offers transthoracic echocardiography (Echo) for both adults and children, allowing for the early and precise diagnosis of structural and functional heart conditions.

**Pediatric interventional procedures**

The Pediatric Cardiology Department is prepared to manage both medical and interventional pediatric cardiology, offering diagnostic procedures, which previously necessitated referrals to larger urban facilities.

**Dobutamie Stress Echo**

It provides advanced tests like Dobutamine Stress Echocardiography, which is essential for assessing patients suspected of having ischemic heart disease who cannot perform standard stress tests.

**Temporary pacemaker facility**

Apart from acute care, SICVD Nawabshah provides sophisticated cardiac procedures, including Temporary Pacemaker (TPM) implantation for patients facing severe heart rhythm issues Through its offerings including 24/7 Primary PCI, ACS and TPM management, adult and pediatric outpatient departments, pediatric procedures, Echocardiography, and Dobutamine Stress Echocardiography SICVD Nawabshah stands as a complete cardiovascular care facility in the core of interior Sindh. Its establishment has not only improved access to essential life-saving treatments but has also reduced the financial and logistical challenges of traveling to Karachi or Hyderabad for healthcare. The institute is continually reshaping the cardiac healthcare environment of the area by providing timely, high quality, and compassionate services to all patients, irrespective of their age or background.

**Dr. Aslam Zardari**
Associate Professor
Consultant Cardiologist
SICVD, Nawabshah

# PERCUTANEOUS CORONARY INTERVENTION AT SICVD SEHWAN: A YEAR IN REVIEW

The interventional cardiology team at SICVD Sehwan continued to deliver high-quality, timely, and patient-centered care in 2024, with Percutaneous Coronary Intervention (PCI) being a cornerstone in managing coronary artery disease. Here are the key highlights from their PCI services:

**Procedures and Outcomes**

• Total PCI Procedures: 1226 procedures were performed from January to December 2024, reflecting a consistent increase in patient inflow, especially for acute coronary syndromes.
• Primary PCIs: 58% of procedures were primary PCIs for ST-elevation myocardial infarction (STEMI) cases.
• Elective and Rescue PCIs: 42% of procedures were elective and rescue PCIs for patients presenting late or with unstable angina.
• Door-to-Balloon Time: Over 80% of STEMI cases had a successful door-to-balloon time of under 90 minutes, aligning with international standards.

**Case Spotlight**

A 47-year-old male patient presented with classic chest pain and anterior wall STEMI. The SICVD Sehwan team efficiently performed a primary PCI with drug-eluting stent placement, restoring TIMI III flow within 35 minutes of arrival. The patient was discharged within 48 hours without complications, showcasing the team's coordination and efficiency.

**Quality Initiatives**

To maintain high procedural quality, SICVD Sehwan:
• Conducts regular audits and morbidity & mortality meetings
• Provides hands-on training sessions for junior residents and cath lab staff
• Participated in over 12 workshops focused on updated PCI techniques and complication management in 2024

**Conclusion**

The year 2024 marked a steady advancement in interventional cardiology services at SICVD Sehwan, driven by skilled personnel, modern equipment, and patient-first protocols. The institution aims to further enhance PCI outcomes and continue saving lives. With its unprecedented protocols and policies, SICVD Sehwan is setting a high standard for cardiac care in the region

**Dr. Mashooque Dasti**
Associate Professor
Consultant Cardiologist
SICVD, Sehwan

# HEART FAILURE CLINIC. NEW WING IN SICVD BALDIA, KARACHI

The SICVD Baldia Center is a significant new addition to the SICVD (Sindh Institute of Cardiovascular Diseases) network, established with the goal of providing high quality, accessible, and free of cost cardiac care to the people of the region. As ta new unit in the SICVD chain, it represents a crucial expansion of a system widely recognized for its extensive reach and commitment to public health. The center is a comprehensive cardiac facility, offering a wide range of specialized services to address various cardiovascular needs.

At the heart of its operations are the essential Cardiac Emergency Services, which provide round the clock care for patients experiencing acute cardiac events? These services are crucial for timely intervention and are often the first line of defense against life threatening conditions. The center is equipped to handle these emergencies with speed and expertise, mirroring the standards of other SICVD facilities.

In addition to emergency care, the center houses an Intervention Clinic, which focuses on advanced procedures to treat heart conditions without major surgery. This includes interventional cardiology procedures like angioplasties and stenting, which are vital for patients with blocked arteries. The facility also features an Electrophysiology Clinic, dedicated to the diagnosis and treatment of heart rhythm disorders. This specialized service is critical for managing conditions such as arrhythmias, often involving procedures like pacemaker and defibrillator implantations.

Recognizing the unique needs of younger patients, the SICVD Baldia Center has a dedicated Pediatric Cardiology Clinic. This department provides specialized care for children with congenital heart diseases and other cardiac issues, ensuring that even the youngest members of the community receive expert and compassionate treatment.

A key highlight of the center's expansion is the establishment of a new Heart Failure Department. This new clinic service is designed to provide comprehensive care for patients with heart failure, a chronic and progressive condition. The department will focus on long term management, patient education, and advanced treatment strategies, offering a much needed service to improve the quality of life for those living with this condition. The addition of this wing demonstrates the center's commitment to not only treating acute issues but also providing ongoing care for chronic cardiac diseases.

Overall, the SICVD Baldia Center is more than just a hospital; it is a complete cardiac care hub that brings a full spectrum of services from emergency and interventional procedures to specialized pediatric and long term care directly to the community, all free of cost. It stands as a testament to the SICVD network's mission to make world class cardiac healthcare accessible to all.

**Dr. Abdul Mueed**
Associate Professor
Cardiac Electrophysiology
SICVD, Baldia

## FISRT TIME HANDMADE RV TO PA CONDUIT (RASTELLI OPERATION)AT SICVD SUKKUR

**INTRODUCTION:**

Right ventricular outflow tract continuity abnormalities are one of the most commonly encountered entities. These type of abnormalities needs reconstruction during corrective surgery for many different congenital heart diseases such as TOF with Pulmonary atresia, Truncus Arteriosus, Ross operation, Transposition of great arteries with ventricular septal defect and pulmonary stenosis (TGA VSD PS).

Cryopreserved homografts have been the conduit of choice in the United States for RVOT reconstruction. Nearly all conduits used for right ventricular outflow tract (RVOT) reconstruction require reoperation because of stenosis or insufficiency of conduit, especially in infants and young children. However, limited availability, short shelf life and high cost makes aortic or pulmonary homografts a less attractive option especially in a resource limited country like Pakistan.

**RATIONAL:**

To overcome the problems of non-availability and high cost, some centers in Punjab are using handmade conduits since more than 10 years with reoperation rate of less than 5%

**MATERIAL:**

We have used a 0.1mm thick polytetrafluoroethylene (PTFE) membrane to make three valve leaflets that are measured, cut to appropriate size and shape and then sewn onto a bovine pericardial patch then configured into a tube graft, the measurements was exactly followed by normogram according to the BSA of the patient..

**CASE DETAILS:**

The conduit was made for 7 years old boy of TOF with pulmonary atresia having adequate size of pulmonary branch vessels on CT Angiogram according to Z-score.

**PREPARATION:**

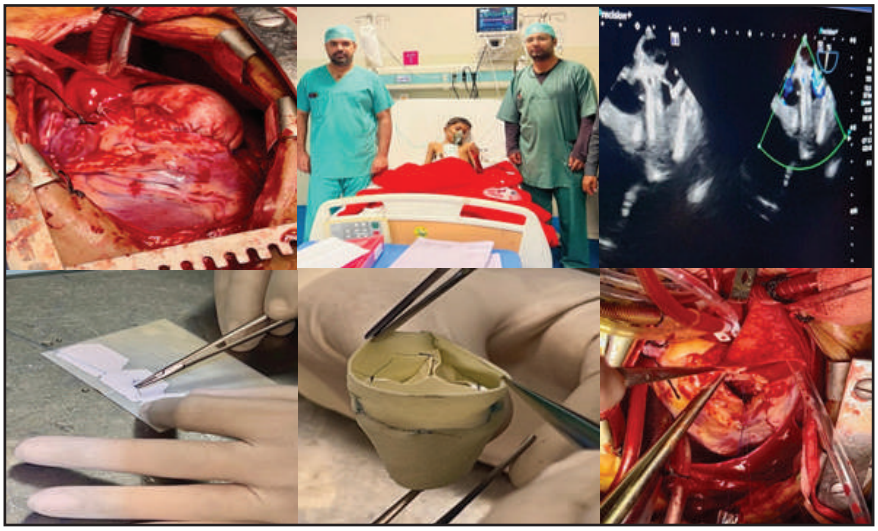
Conduit was made night before the surgery and place in glutaraldehyde solution

**OPERATION:**

After putting the patient on routine bicaval bypass, dissection of complete aorta and pulmonary artery upto the terminal branches of the branch PAs was carried out, PDA was ligated and divided, MPA was cut down at the level of bifurcation and distal end of the conduit was anastomosed with branch PAs on beating heart, the proximal end of the conduit was anastomosis with RV and VSD was closed after cardioplegia with trans atrial approach and weaned off from bypass with no bleeding and low ionotropic support, TEE was satisfactory with no significant pulmonary regurgitation and pulmonary artery gradients

**POST OPERATIVE PERIOD:**

Patient shifted to ICU with closed chest was extubated after 4hours and discharged on 6th POD.



**Dr. Zubair Ahmed Brohi**
Assistant Professor
Congenital Cardiac Surgeon
SICVD, Sukkur

**Dr. Kamal Kumar**
Assistant Professor
Cardiac Anaesthetic
SICVD, Sukkur

# QUIZ CORNER

**Q-1: A 58-year-old male diabetic on oral hypoglycemic drugs, Smoker (50 packs/year) presents in nearby tertiary care hospital with complaint of chest pain for 2 hours, diaphoresis.**

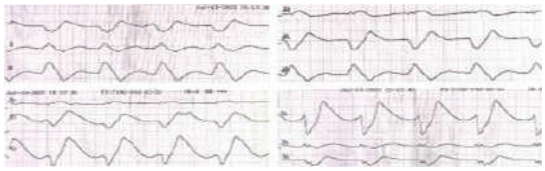
What is the most appropriate next step?

A. Obtain cardiac enzymes before starting therapy
B. Immediate coronary angiography with PCI
C. Give thrombolytics and observe
D. Start dual antiplatelets and admit to CCU

**Q-2: A patient with chronic kidney disease presents in ER with complaint of decreased urine output, shortness of breath and altered sensorium, on arrival he is hemodynamicaly stable, RBS 398 mg/dl.**

(ECG Findings: peaked T waves, widened QRS complex, sine wave pattern).

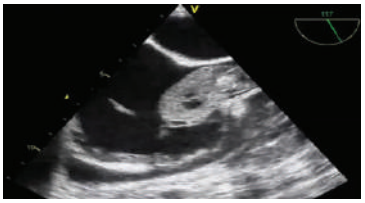
What electrolyte abnormality is most likely?



A. Hypokalemia
B. Hypercalcemia
C. Hyperkalemia
D. Hypomagnesemia

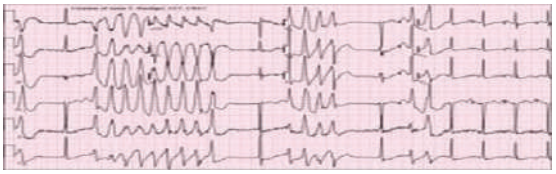
**Q-3: 40 year's male admitted through ER complaining of dyspnea and shortness of breath, GCS of nine on examination bilateral jugular venous congestion. Patient was intubates and ventilated. Transesophageal echocardiography examination was suggested, identify the view and positive finding.**

A. Mid esophageal aortic valve view with large thrombus
B. Modified Bicaval view and mass in the superior vena cava, protruding into the right atrium
C. Mid esophageal ascending aorta view with large thrombus
D. Bicaval view and mass in the superior vena cava, protruding into the right atrium



**Q-4: A 63-year-old woman is brought to the emergency department after a syncopal episode. She was found unconscious at home for 10 seconds and spontaneously regained consciousness. Labs reveal K 2.9 mmol/L and $Mg^2$ 1.4 mg/dL. Her medications include citalopram and ondansetron.**

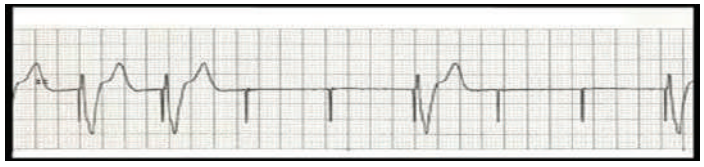
What is the most concerning complication?



A. Atrial fibrillation
B. Torsades de Pointes
C. Bradycardia
D. Left bundle branch block

**Answers on next page**

**Q-5: A 78-year-old patient with a permanent pacemaker presented with light headedness, following ECG is recorded. What is the most likely issue?**



A. Ventricular capture failure
B. Oversensing
C. Atrial lead dislodgement
D. Pacemaker syndrome

**Q-6: A 36-year-old male presents after a nocturnal syncopal episode. He has no significant past medical history but mentions a family history of sudden cardiac death in a sibling at age 28. He denies chest pain or palpitations. His ECG given. There are no structural abnormalities on echocardiography.**

Which management is indicated?

A. Beta blockers
B. ICD placement
C. EPS study and ablation
D Isoproterenol infusion

**Q-7: A patient with known ischemic cardiomyopathy EF of 25%, on maximum tolerated dose of heart failure therapy and strict life style modification and an ICD were implanted for secondary prevention. Now presented with complaint of shortness of breath while doing his daily activities. Shows LBBB with QRS duration of 160 what is the best next step?**

A. Upgrade to CRT
B. Repeat echo in 3 months
C. Add ivabradine
D. Start beta blocker and re-assess

**Q-8: A 28-year-old male presents with sharp chest pain that worsens when lying down and improves when sitting forward. He recently had an upper respiratory tract infection. On auscultation, a pericardial friction rub is heard. Troponins are normal.**

What confirms your diagnosis?

A. Echocardiogram showing tamponade
B. Cardiac MRI
C. Classic ECG pattern and clinical context
D. ST elevation with reciprocal changes

**Q-9: Which of the following physical exam findings supports the diagnosis of acute pericarditis?**

A. S3 gallop
B. Pericardial knock
C. Pericardial friction rub
D. Pulsus paradoxus

**Q-10: Which of the following is not typically a diagnostic criterion for pericarditis?**

A. Pericardial effusion
B. Elevated troponins
C. Typical chest pain
D. Widespread ST elevation

**Dr. Aadil Memon**
Senior Registrar ER
Sindh Institute of Cardiovascular Diseases (SICVD) Hospitals

**Answers on next page**

# A BEACON OF CARDIAC CARE IN SOUTHERN SINDH

The Sindh Institute of Cardiovascular Diseases (SICVD) Mithi Satellite Center continues to redefine healthcare accessibility in the remote desert region of Tharparkar. Established with the vision of bringing state of the art cardiac services to underserved populations, the center now stands as a model of excellence, providing round the clock specialized care not only to local communities but also to international citizens, including the Chinese workforce engaged in the Thar Coal and CPEC projects..
Comprehensive Cardiac Services

SICVD Mithi is equipped with a full spectrum of cardiac services designed to meet urgent and routine needs:

24/7 Cardiac Emergency & Primary PCI:
Cardiology OPD: Comprehensive outpatient consultations and follow ups for adult cardiac patients.

Pediatric Cardiology OPD & Echocardiography: Specialized services for children with congenital and acquired heart diseases.

Echocardiography Services: High resolution echocardiograms, including adult and pediatric studies, for accurate diagnostics.
Impact Beyond Borders

What makes SICVD Mithi particularly significant is its dual impact. On one hand, it addresses the unmet healthcare needs of local communities across Thar, Nagarparkar, Islamkot, Umerkot, and adjoining districts. On the other, it plays a strategic national role by serving foreign professionals and engineers linked to CPEC and Thar coal energy projects, thereby strengthening Pakistan's healthcare readiness in an international context..

**Dr. Gian Chand**
Associate Professor
SICVD, Mithi

**Answer: Q1. B, Q2. C, Q3. B, Q4. B, Q5. A, Q6. B, Q7. A, Q8. C, Q9. C, Q10. B**

Sindh Chief Minister Syed Murad Ali Shah presides over a meeting to review the progress of the Sindh Institute of Cardiovascular Diseases (SICVD) at CM House.

Dr. Muhammad Moosa (COO, SICVD) is receiving the 17th CSR Award 2025 in recognition of SICVD's unwavering commitment to delivering world-class, free cardiac & stroke treatment

Prof. Jawaid Akbar Sial (Executive Director, SICVD) is inaugurating (Soft Opening) SICVD Baldia Town Karachi

Syed Khursheed Ahmed Shah, Senior PPP Leader and MNA, visited SICVD Baldia Town Karachi, where he toured various departments

SICVD, NICVD, and HAMI signed a MoU for collaborative initiative is aimed at strengthening efforts in public awareness, early detection, and prevention of heart diseases

An insightful session with Dr. Muhammad Moosa, COO of SICVD, at the Rotary Club of Karachi Bay

Barrister Murtaza Wahab (Mayor Karachi) visited SICVD Baldia Town Karachi, during his visit Dr. M. Moosa (COO, SICVD) briefed him about the facilities

SICVD Sukkur successfully conducted a PTMC (Percutaneous Transvenous Mitral Commissurotomy) Workshop, treating 12 high-risk patients with severe Risk Rheumatic Mitral Stenosis

Proud Moment for SICVD Larkana! Three synopses shortlisted at the national PHL Shark Tank Competition with Dr. Deepa Ahuja winning 2nd Prize! A true reflection of our academic and clinical excellence

12 High Risk Rheumatic Mitral Stenosis Patients Receive Successful PTMC Treatment at SICVD Sukkur Workshop

Free Screening Camp at CPU Malir Cantt, offered free blood tests. Patients also received free medicines and gifts as part of our mission to promote heart health and wellness

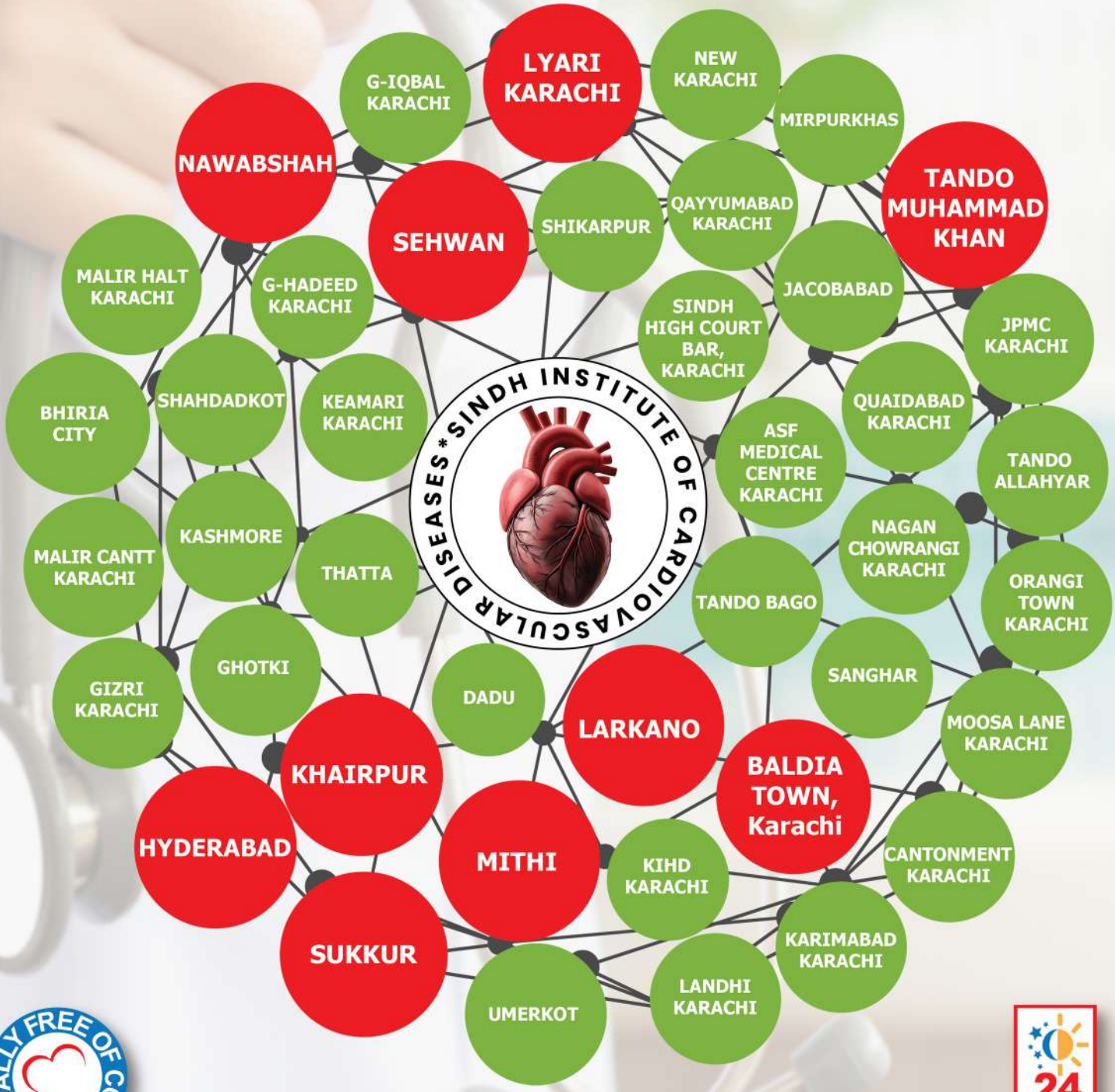
SICVD has started Electrophysiology Program at Sehwan, 1st Permant Pacemaker was implanted, successfully

SICVD
SINDH INSTITUTE OF CARDIOVASCULAR DISEASES

**With the inauguration of SICVD Baldia Town, Karachi, thousands of patients now have access to free, world-class treatment for heart diseases, closer to their homes, closer to their hearts**

SICVD
SINDH INSTITUTE OF CARDIOVASCULAR DISEASES

# From Karachi to Kashmore: Serving the people of Sindh with free, life-saving cardiac and stroke care

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