

HEART BEAT

A Quarterly Issue for the Faculty and Staff of Tabba Heart Institute

Issue No. 08, November 2009

Tabba Heart Institute's Central Sterile Services Department (CSSD)

With the new emerging trends in healthcare industry, it has become the obligation of the health professionals not only to facilitate patients in terms of cure, but also to prevent transmission of disease. An important measure against spreading of diseases is the necessity that all medical supplies, such as instruments, swabs, drapes etc, that come in direct contact with open wounds or body fluids, are rendered sterilized and free of micro-organisms. A wide range of methods are in use, all with their specific field of application: moist heat, dry heat, ethylene oxide, and formaldehyde, irradiation, and gas plasma. Sterilizers should meet the stringent technical standards for performance and safety.

Tabba Heart Institute's Central Sterile Services Department follows international standards and recommendations to promote safer patient care by applying latest and most modern methods of sterilization. THI has thus minimized the infection rate, both in surgical and medical patients.

The soiled materials, sealed in appropriate containers, are taken to the washing section of the sterilization department where they are thoroughly cleaned till the removal of all visible debris and dirt. Each individual instrument is then subjected to a vigorous inspection before they are packed. Such packing allows the sterilizing agent to reach the instruments inside whereas after sterilization it prevents recontamination during storage. Sterilization is done through steam sterilizers called "Autoclave", using pressurized high temperature steam. The sterile goods are stored in a dedicated storage area, with specialized environmental conditions to ensure the integrity of each sterile item until its use.

Each step in the sterile supply cycle is crucial; a small error or negligence during any of the steps may cause recontamination which may cause infection and inconvenience to the patient. The entire process is therefore subjected to vigilant monitoring, analysis and documentation, to maintain the Standardized Sterility Assurance Level.

THI has conducted One Year CSSD In-House Training Program to enhance staff's knowledge, technical skills and work competency, thus delivering service that meets predefined quality standards and the provision of better patients care.



THI
AMBULANCE
SERVICES

Ensuring the maximum convenience to all THI patients and availability of pertinent facilities at the doorstep of the institution, Tabba Heart Institute has extended its services by providing and stationing ambulances inside the premises of the hospital. These ambulances are fully equipped with all the necessary paraphernalia, needed for the safe transportation of the patient from anywhere in the city.



Editorial Board

Mohammad Yousuf
Farzana Amir Hashmi
Fahad Anwer Chishty
Dr. Shamim Siddiqui
Sadia Abbas
Zeeshan Butt

Dear Colleagues,

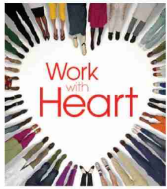
The Board wishes you all a very Happy Eid with all the joys of the season. We avail this occasion to extend our heartiest felicitations to those colleagues and their family who have been blessed the opportunity to perform Hajj this year. May Allah swt accept all their supplications. We also wish a belated 'Diwali' to our Hindu colleagues and their family. We thank you for your contribution and patronage which has remained a source of encouragement for us at the board and has been instrumental in the promotion of this journal. We are pleased to announce the induction of Mr. Fahad Anwer Chishty as member of the editorial board. Gratitude and appreciation of service is expressed for Mr. Farrukh Siddiqui, who has retired from the board. We wish a Merry Christmas to our Christian colleagues and a Happy New Year to all.

Mohammad Yousuf



Tabba Heart
Institute

A state-of-the-art Cardiac Hospital
Where you meet caring, friendly people



WORLD HEART DAY

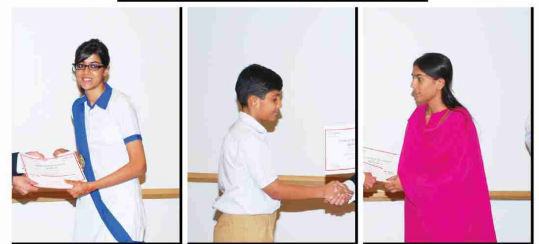
The heart diseases with their manifestations are affecting people of all age groups and are the leading cause of death worldwide. However, World Heart Federation, through commemoration of World Heart Day, has given a strong call for change in life style and dietary habits that could minimize the risk factors of heart ailments to a great extent and save the heart.

to mark the day including walks, fitness sessions, public talk shows, stage shows, scientific forums, exhibitions, concerts, carnivals and sports tournaments. This year's theme was "Work with Heart", targeted at workers across the country, to make them realize the importance of a healthy working lifestyle in order to stay fit and be more productive.

Tabba Heart Institute observed the World Heart Day with same zeal and enthusiasm as in the past. A month long series of activities were organized that included Inter School Poster Competition and free Screening Camps at various clubs and Institute of Business Management, Karachi. All these events were highly informative and well attended by the community.

The chain of events commenced on September 27, 2009 with an Inter School Poster Competition, arranged at THI, in which renowned schools of Karachi city, like Beacon House School System, City School, Falcon House Grammar School, Generations School, Metropolis School, Foundation Public School and Head Start School participated. THI had the honor to host eminent figures including Mr. Anwar Maqsood and Mr. M. A Bukhari as jury members. The esteem presence of Dr. Farooq Sattar (Federal Minister for Overseas Pakistanis) as guest of Honor, added value to this event. The event was well attended by the THI staff, School representatives, students and their parents along-with distinguished personalities of the city.

On the same day, Free Screening Camps were organized at Karachi Club and Karachi Gymkhana, where Random Blood Sugar (RBS), Body Mass Index (BMI) and Cholesterol Tests were conducted. Free Cardiac Consultation was also provided to those who were interested. This activity witnessed a huge participation; more than 100 members of respective clubs had their screening done. The activity proceeded with similar camps at the Tabba Heart Institute Laboratory Collection Unit (Gulistan-e-Johar), IBA City Campus, DHA Golf & Country Club, and Creek Club, Karachi, and concluded on October 18, 2009.



CME PROGRAM

CONTINUOUS MEDICAL EDUCATION



- A Continuous Medical Education program was organized by the CME committee of THI on August 12, 2009, about "Ramadan and Diabetes". Ms. Mehreen Amir, Dietician THI, discoursed on dietary habits to be maintained during Ramadan and Ms Shahida Perveen, Diabetic Nurse Educator, discoursed about the subject. Dr. Mohammad Yakoob Ahmedani, Consultant Diebatologist, provided current, practical updates on the subject. It was attended by a large number of THI patients, their families, and THI staff.
- Another educational session was organized on October 10, 2009, by CME Committee in collaboration with Unilever Pakistan Ltd. The session was well attended by doctors and paramedical staff.
- Two ECG Workshops were conducted consecutively on October 24, and November 7, 2009, by CME Committee in collaboration with Baqai Medical Institute Karachi. The event comprised of high quality lectures by Dr. Irfan Elahi Chandna, Dr. Shamim Siddiqui, Dr. Faisal Qadir and Dr. Ayaz Hussain. Primary care physicians from the community, cardiology fellows and paramedical staff attended

WELCOME TO THI FAMILY

- Dr. Nousheen Riaz – Medical Officer, Cardiology
- Shahnila Mustaqeem – Phlebotomist, Laboratory
- Muhammad Abdullah – Junior Inventory Officer, MMD
- Afshan Bano – Phlebotomist, Laboratory
- Danish Hakeem – Pharmacy Assistant, Pharmacy
- Khalid Hussain – ECG Technician, Laboratory, Medilink
- Navaid Ahmed Siddiqui – Bio-Medical Engineer
- Naveed Imran – Accounts Officer, Finance & Accounts

We also cordially welcome the 3rd Batch of Post Basic Cardiac Nursing students (session 2009-2010)

THE DIVINE WEDLOCK



- Mr. M. Naveed Pakhali – Junior Inventory Officer in October 2009.
- Mr. Asif Memon – Junior Inventory Officer in October 2009.
- Mr. Qaiser Ejaz – Asst. Manager Marketing & PR in October 2009.

PROMOTIONS

- | | |
|---------------------------|---------------------------------|
| • Aneela Zahid | Assistant Manager, Pharmacy |
| • Muhammad Tariq Abbasi | Senior ISO Coordinator |
| • Dr. Seema Ali | Incharge, Emergency |
| • Dr. Muhammad Umer Hafiz | Incharge, Emergency |
| • Nadeem Arfi | Senior Officer, Communication |
| • Abdul Qayyum | Supervisor Microbiology |
| • Richard Immanuel | Senior Purchase Officer |
| • Yasir Lateef | Senior Rehab Specialist |
| • Syed Aqleem Akhtar | Senior Officer, Human Resources |
| • Mohsin Ali | Senior Audit Officer |
| • Saeed Ahmed Siddiqui | Inventory Officer |
| • Ghulam Nasir | CSSD Supervisor |
| • Syed Asad Hashmi | Marketing Officer |
| • Bilal Naseem | Junior Officer, Human Resources |
| • Sohail Hashwani | Junior Officer, Human Resources |

THE STORK VISITS



- Baby Abdul Basit - Kamran Khuaja (Nursing).
- Baby Annie Preetum - Preetum Das (Nursing)
- Baby Areesha - Zahid Ahmed (Finance & Accounts)
- Baby Girl - Dr. Moinddin Khan (Cardiology)
- Baby Boy - Mr. Naseem Liaquat (Rehabilitation)
- Baby Suzannah - Daniel Gill (Nursing)
- Baby Areeb Hammad - Hammad Ahsan (MIS)
- Baby Haniyah Siddiqui - Mr. Farrukh Siddiqui (Marketing & PR)
- Baby Boy - Mr. Fahad Anwer (Marketing & PR)

GROUND BREAKING CEREMONY

To execute the extension plans of THI's premises, a formal ground breaking ceremony for the new structure was held on October 10, 2009. The ceremony was attended by Mrs. Kulsoombai R. Tabba, Ms. Maryam Razzak Tabba, Syed Ilyas Ahmed, and other distinguished members of Aziz Tabba Foundation and Tabba Heart Institute.

The project includes the construction of a ware house, laundry, staff/visitors' parking area and Aziz Tabba Foundation Secretariat. The project is scheduled to be completed by the end of 2010.



Eid Milan Party

THI family celebrated the auspicious occasion of Eid-ul-Fitr with zeal and fervor on Thursday, September 24, 2009 in the congenial environment of the hospital cafeteria. The place was beautifully festooned in filigree of colorful ribbons and presented a refreshing look. All the members of the THI family, including the top Management joined in the celebration to exchange greetings, promoting a sense of fraternity.

Star Performers

(Jul-Aug 2009)



Dr. Mohammad Hayat
Senior RMO
Medicine



Muhammad Yousuf
Store Assistant
MMD



Shakeel Ahmed
Porter
Nursing

گلاب دیوار

آرتھوپڈیک کے ایک ڈاکٹر نے کردار کے ایک مریض کو سیرھیاں چڑھنے سے منع کر دیا۔ ایک ماہ کے بعد مریض نے ڈاکٹر کو دوبارہ چیک کرایا اور پوچھا ”جناب اب میں سیرھیاں چڑھ سکتا ہوں، میرا گھراصل میں دوسری منزل پر ہے۔“

ڈاکٹر نے کہا ہاں! کیوں نہیں!!

”بہت بہت شکر یہ ڈاکٹر“ اس نے کہا۔ پچھلے ایک ماہ سے بڑے پاپ اوپر چڑھتے چڑھتے تنگ آ گیا تھا“

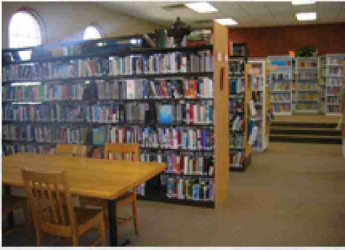
کارڈیالوجی وارڈ میں صرف دل کے مریض ہوتے ہیں۔ دل کے مریض یا تو مجھو بہ کی آغوش میں سکون پاتے ہیں یا کارڈیالوجی وارڈ میں۔ دونوں مقام بہت مہنگے اور خطرناک ہیں۔ مجھو بہ کی آغوش تک پہنچنے کے لیے بھی زندگی سے کھینا پڑتا ہے اور کارڈیالوجی وارڈ کے ڈاکٹر کی فیس دیتے ہوئے بھی ایک ہاتھ دل کا دورہ ضرور پڑتا ہے۔ وارڈ کے دو حصے ہوتے ہیں ایک عام اور دوسرا intensive۔ یہاں اکثر اچھے اچھے گھروں سے کھاتے پیتے لوگ آکر کئی دن داخل رہتے ہیں۔

ڈاکٹر محمد یوسف سمر کی کتاب ”ہمارا سچا“ سے اقتباس

BEREAVEMENTS

- Elder Brother of Ms. Pauline Benjamin (Sr. Instructor NES) in August 2009.
- Father of Mr. Sagar Abbas (NA) in September 2009.
- Sister of Mr. Rashid Irshad (Security Guard) in September 2009.
- Elder Sister of Mr. Mohammad Yousuf (Stores Assistant) in October 2009.

Tabba Heart Institute Library



The high quality service in healthcare sector, especially cardiac healthcare, demands well-resourced professionals with latest research & skills. THI library was founded to encourage academic research activities & to fulfill informational needs of THI faculty, staff & students.

THI-Library is compatible with any health sciences library in Pakistan; despite its small size, THI Library has immense and dynamic collection of books, online journals, Digital collection, PDF books, video lectures, DVDs, CDs & audio cassettes, related to Medical and Nursing Care of Heart patients. The library books are classified according to NLM (National Library of Medicine) Classification Scheme

THI library is used as a reference library i.e. Resources are used inside the library premises. However to facilitate library patrons, outside the hospital premises, we have initiated a unique

service of online books. This service gives remote access to hundreds of books on cardiology, cardiac surgery and cardiac nursing care through.

www.myebook.com/thilibrary

THI-Library updates & arranges all library resources & online links in E-Library (Library's Centralized Folder). In E-library, the E-Books folder has more than 1000 PDF books on cardiology, pharmacy, surgery & other subjects, current journals on cardiology like JACC, AJC, Circulation & JAMA are kept in PDF Journals 2009. E-Library folder also has links to online medical journals, books, medical videos, online Lectures, PPT presentations, nursing educational material, etc.

The Higher Education Commission of Pakistan provides online international journal to THI. on regular basis. In 2009 The HEC Pakistan extended its online resources, more databases & journals like, WILEY-BLACKWELL JOURNALS, MCGRAW HILL COLLECTIONS MEDICINE & SCIENCE, SPRINGERLINK, TAYLOR & FRANCIS Journals, & PROJECT MUSE.

These resources enable search & download of articles from thousands of medical journals. Like-wise EBRARY, is the portal to access on-line books with personal bookshelf, citations, heights, notes & print option. All HEC resources are available at: www.digitalibrary.edu.pk/tabba-heart.html

Computers are also used to utilize digital collection, textual & visual resources of THI-Library. THI-Library has free 24 hours internet access, especially for trainees. Internet is used purely for research purposes. High speed internet connectivity, on our five terminals, makes it possible to access beyond library's own collection.

Exceptional Case-A Successful Complex Open Heart Surgery

Tabba Heart Institute has had various instances where its well qualified and experienced medical faculty treated some of the most complicated patients successfully. One such case treated recently by cardiothoracic surgeon Dr. Ghufuranullah khan was a 65 yr old lady who before this surgery had an angioplasty of the circumflex artery but during LAD angioplasty procedure, there was displacement of the stent from left main artery in to the aorta at an other Institution. The patient was brought to THI in emergency where an immediate bypass surgery was performed. This complex procedure, was successfully carried out and the patient was discharged from the hospital sound and healthy.

Our Associates Shahnawaz Engineering (Pvt.) Ltd

The name "Shahnawaz" stands for a successful group of companies in Pakistan, with country wide network of offices and support centers at Karachi, Lahore, Faisalabad, Rawalpindi, Islamabad and Peshawar.

Shahnawaz Engineering (Pvt.) Ltd is a Private Limited Company of Shahnawaz Group of Companies. It is engaged in providing Engineering Services, including Air Conditioning design, Supply, Execution, Operation and Maintenance of large projects. It has a team of highly qualified and experienced professional engineers who are dedicatedly performing their services at various projects throughout Pakistan. Project Managers are acquainted with latest professional techniques and tools, and are foreign trained in respective fields.

At Tabba Heart Institute, Shahnawaz Engg. Pvt. Limited has installed and are maintaining 03 Chillers (Central Air-Conditioning) of 210 tons each. Distinctively operating Air Handling and Fan Coil Units according to the international standards of Building Management Systems (BMS).

The Management of Tabba Heart Institute highly lauds the long association with Shahnawaz Engg. and look forward to a continuous support for the maintenance of the equipment.

Marvels of the Nature

- A sliced **CARROT** looks like the Human Eye and it greatly enhances blood flow to the eyes
- A **TOMATO** has 4 chambers and is red just like the heart. A Tomato is loaded with Lycopine that is pure heart & blood food.
- A **WALNUT** looks like the brain and helps to develop more than 3 dozen neurotransmitters to enhance brain function
- **BEANS** are kidney shaped and they heal and help to maintain kidney functions .



(Ref: Masala TV)

EID UL ADHA KAY PAKWAN



"Eid-ul-Adha" is an Islamic festival celebrated in commemoration of Hazrat Ibrahim A.S's spirit of sacrifice. This Eid is arrayed with rich and tempting dishes of red meat, high in calories and extremely delicious. However to observe healthy eating habits, these dishes must be low in unsaturated fats, prepared in lesser oil and should be moderately spicy. Organ meat should be avoided as much as possible; if you desire to have organ meat, just "taste it".

Taste the true flavor of Eid-ul-Adha with the following delicious yet healthy recipes.



HANDI KABAB

(Serves 8)

Ingredients:

Beef qeema without fat	1 kg
Garam masala	2 tsp
Ginger garlic paste	2 tbsp
Papaya paste	¼ cup
Salt	2 tsp
Yogurt	1 cup
Red chilli powder	2 tbsp
Roasted Cumin seeds	2 tsp
Roasted chana powder	2 tbsp
Onion	1 large
Oil	½ cup
Cream	2 tbsp

(Not recommended for cardiac patients)

Preparation:

- Marinate meat in salt, garam masala, ginger garlic paste, red chilli powder and yogurt for 2 hours.
- Fry onions till golden brown in preheated oil.
- Add qeema to the same oil, cover and cook on low flame for 10-15 minutes.
- When meat becomes tender, place a burning coal on a bread slice in the center of the pan, pour a few drops of oil on it and cover the pan for 3-5 minutes.
- Now remove the coal, mix fried onions in qeema and cook for 2-3 minutes.
- Add roasted chana powder, cumin seeds and cream.
- Mix well and serve garnished with coriander leaves and ginger.



SPICY CHOPS

Ingredients:

Mutton chops fat free	1 kg
Whole red chillies	8
Black pepper	1 ½ tsp
Ginger Garlic Paste	1 tbspn
Ginger small piece	1" cube
Fresh lemon juice	4 tbsp
Sliced onion	1 med
Green chopped chillies	2-3
Fresh coriander leaves	3 tbsp
Salt	2 tsp
Oil	½ cup

Preparation:

- Grind whole red chillies, black pepper and add to ginger garlic paste.
- Fry onions till golden brown in preheated oil.
- Add chops and salt, cover and cook on low flame for 10 minutes.
- When chops get tender, add chillies, black pepper and ginger garlic paste; cook for 5 minutes.
- Turn the flame off, squeeze lemon juice on the chops and mix well.
- Serve in a dish, sprinkle chopped coriander leaves and green chillies on top before serving.

PRESERVATION OF SACRIFICIAL MEAT

On Eid-ul-Adha the most observed practice is consumption and storage of sacrificial meat. Immediately freezing the meat causes development of harmful bacteria; that is why it is very important to know the correct and healthy methods of preservation.

- Meat should be kept 6 hours in open air before cooking and freezing.
- Temperature of freezer should be in between 33° F and 36° F.
- Whole cuts of meat can be kept frozen for 4 to 12 months (i.e. steaks cuts)
- Ground meat (i.e. minced meat, qeema) may be stored for 3 to 4 months in freezer.
- Shami kabab made from ground meat should be stored for maximum 14 days.
- Cured meat (i.e. meat preservation by means of added salt) should be stored in freezer approximately for 1 week only.
- Make smaller portions of meat (i.e. 6 to 8 boti) and put it in a shallow dish in order to make it cool more quickly.
- When defrosting raw meats, put it on the bottom shelf of the fridge on a plate or tray and make sure it does not drip onto other foods.
- When defrosting frozen meat, keep it in luke warm water for 6 hours.
- Utilize the whole portion of defrosted meat otherwise it may cause spreading of bacteria within.
- Discard defrosted ground meat and organ meat after 2 days once they are out from freezer.
- Cooked meat should be consumed within 3 days only if kept in fridge.
- Cooked meat should not be left un-refrigerated for more than 2 hours.
- While preparing meat dishes, wash your hands thoroughly for 20 seconds before doing and after handling raw meat.
- Make sure to use separate cutting board and utensils for meat to avoid cross contamination.
- Grilling or BBQ is healthy cooking techniques; do not leave your steaks sizzling in the sun for hours before cooking.
- Do not keep marinated meats in the fridge for more than 8 hours.
- Organ meats (i.e. kidney, liver, heart, brain) should be stored in the freezer for maximum 1 month.
- During power failure, minimize opening of refrigerator and freezer. If the duration of power failure lasts more than 6 hours, remove the meat from freezer as it becomes contaminated in such case.

Meat overdose can be dangerous for people with liver disorders, increased uric acid, hypertensive, diabetics as well as patients of hepatitis and jaundice. However, meat is rich in protein and other nutrients if consumed in moderation. Healthy individual can consume 303 calories from lean meat (trim off fats) one can have 2-3 boti per meal, which provide 75 calories. Sacrificial meat is healthier as compared to meat available in the market.

Prevention of Heart Diseases



Cardiovascular disease is a leading cause of global mortality, accounting for almost 17 million deaths annually. Nearly 80% of this global mortality and disease burden occurs in developing countries. Altered diet with increased fat and total caloric consumption and increased tobacco use are prevalent lifestyle trends. Demographic changes coupled with adverse lifestyle changes will accelerate the number of deaths due to cardiovascular disease worldwide, many of which will be premature in the developing countries including Pakistan. Coronary artery disease is the most common form of heart disease and is the leading killer in the world. Moreover, millions of victims remain alive yet hopelessly crippled.

Coronary artery disease, the most common of all heart problems, is characterized by blockages in the coronary arteries that result in a reduction in blood flow to the heart muscle, depriving it of vital oxygen. Usually, the disease stems from atherosclerosis, a condition sometimes called hardening of the arteries. Formation of a blood clot on top of these blockages leads to heart attack. Fifty percent of patients who suffer heart attack do not survive and in fact they do not even reach the hospital.

Symptoms of Heart Disease

The most common symptoms of heart disease are chest pain (also referred as angina) due to blocked blood vessels of the heart (coronary artery disease) shortness of breath, dizziness, loss of consciousness (syncope), palpitations, and leg swelling.

Chest pain secondary to blocked blood vessels of the heart (angina or heart attack) typically presents as chest discomfort, tightness or squeezing sensation or heaviness in the chest that worsens with activity. Common associated symptoms include shortness of breath, sweating, nausea or vomiting. Atypical symptoms suggestive of angina or heart attack may include jaw pain, throat tightness, back pain or shoulder pain. The most important feature to remember is worsening of the symptoms with exertion. If the pain does not worsen with activity, it is less likely secondary to coronary artery disease. Sudden cardiac death is often the first manifestation of heart disease and is the terminal event in more than half of heart disease patients.

Risk factor of Heart Disease

There are several measurable factors that predict the development of cardiovascular disease. These factors are termed as risk factors. These risk factors can be divided into **modifiable** and **non-modifiable** risk factors. The modifiable risk factors include high blood pressure (Hypertension), high blood sugar (Diabetes), abnormal cholesterol levels -- high blood levels of "bad" (LDL cholesterol) or low levels of "good" (HDL cholesterol), smoking, stress, overweight/obesity, physical inactivity (sedentary lifestyle) and poor dietary habits (less fruits and vegetables). Non-modifiable risk factors include age, gender -men are more apt to be affected than women and family history. It is important to note that the family history of heart disease is only significant if it is present in first-degree relatives (males at the age of <55 years and females < 65 years). Coronary artery disease in any other relatives or after this age group is not contributory. Persons who have multiple risk factors generally are more likely to experience a cardiovascular event than those with a single risk factor.

Smoking

Tobacco is one of the major risk factors for coronary artery disease and is responsible for five million deaths globally. Cigarette smoking is the most important preventable cause of premature death in men and women. Many studies detail the evidence that cigarette smoking is a major cause of coronary heart disease, which leads to heart attack. Smoking cessation can prevent large number of premature deaths secondary to coronary artery disease.

Early detection and treatment of the modifiable risk factor can prevent the heart disease. Therefore it is very important to have screening for modifiable risk factors especially high blood pressure (hypertension), high blood sugar (diabetes mellitus) and abnormal cholesterol levels.

High blood pressure and high blood sugar are considered silent killers. Most of the patients are reluctant to take medications for high blood pressure, as they have no symptoms. Unfortunately when patient develops any signs or symptoms (stroke, heart attack, kidney failure) secondary to high blood pressure or high blood sugar, it is too late, hence it is very important to have the blood pressure and blood sugar optimally controlled before any of the signs develop. Target blood pressure should be less than <140/90 in general and <130/80 in patients with diabetes (high blood sugar).

Therapeutic life style changes in relation to tobacco cessation, healthy food choices, weight control, and physical activity is the foundation of prevention & treatment of heart disease. Focus on exercise, weight reduction, & diet can help to reduce the incidence of heart disease. Patients who make small changes, even adding three 10-minute walks throughout the day, change their status from sedentary to active, and significantly reduce their risk levels even without losing weight. A balance in caloric intake and energy expenditure is fundamental to any program that seeks to alter and maintain ideal body weight. Exercise based cardiac rehabilitation in patients with established coronary disease has been shown to reduce total cardiovascular and coronary mortality. A useful recommendation for individuals at high risk is to reduce the quantity of food they consume by 20% to 25%, reduce animal fats, and decrease the amount of salt added to foods in cooking and at the table.

Summary

In summary coronary heart disease is a preventable disease and can be easily be prevented or the risk significantly decreased by adopting the following healthy lifestyle modifications:

- An overall healthy eating pattern
- Cholesterol lowered to appropriate level based on individual risk
- At least 30 minutes of moderate-intensity physical activity on most (preferably all) days of the week
- Achieve and maintain desirable weight (body mass index 18.5-24.9 kg/m²); and
- Normal fasting blood glucose (below 110 mg/dl)
- No exposure to tobacco smoke
- Blood pressure maintained below 140/90 mm Hg; below 130/85 mm Hg for people with kidney damage or heart failure; or below 130/80 mm Hg for people with diabetes

The overall message is that preventive measures are, for the most part, inexpensive and will reduce the incidence of death and disability due to cardiovascular disease.

Pacemakers – All you need to know

First pacemaker was implanted over forty five years ago. Over three million have been implanted since then. Each year approximately 100,000 people in the United States and additional 100,000 all over the world are added to this number.

What is a Pacemaker?

A pacemaker is really a system that has two parts --- a small metal titanium can containing the electronic circuitry and long-lasting battery, called pulse generator, and an insulated wire, called a lead.

The pulse generator produces a small electrical signal that you will not feel. The lead carries the signal to the heart – stimulating the heart. The lead also carries the signal back to the pulse generator if and when heart beats on its own. Nowadays pacemakers are very small and light as compared with early pacemakers. Many technical advances have also taken place over the years. One of the most important advances has been the change in the pacing heart rate with activity due to sensors inside the pacemaker, mimicking normal healthy heart. Many pacemakers also detect changes in heart rhythms and automatically change the pacemaker operation with out any surgical procedure or programming.

What does a pacemaker do?

Pacemakers restore the normal heart rhythms in people with very slow or irregular heart rate. They smooth out the irregular rhythms and speed up the very slow heart rate.

The Normal Heart

The heart has an electrical and plumbing system. The problem with plumbing system – arteries results in angina or heart attack. The problem in the electrical system can result in very slow heart rate. The pumping function of the heart is controlled by a small electrical impulse generated by the heart's natural pacemaker located in the right upper chamber of the heart. This impulse then travels through the electrical system to the lower chambers of the heart, causing the heart to beat. This process repeats over and over again, approximately 100,000 times a day.

Do you need a Pacemaker?

Various heart diseases and conditions may damage the electrical system of the heart resulting in one or more of the following:

Slow heart rate: Pulse generating mechanism in the right upper chamber of the heart itself becomes "Sick" and slows down the heart rate.

Fast heart rate: The upper chambers of the heart begin to fire at a very fast and irregular heart rate. When the medications are given to slow the heart rate, it slows the heart rate too much resulting in need for pacemaker.

Heart Block: Signal from the upper chambers of the heart may be blocked from reaching the lower chambers of the heart.

Any one of these conditions can severely decrease the heart's ability to pump blood efficiently throughout the body. The lack of blood may cause symptoms such as shortness of breath, fatigue, dizziness and fainting.

Remember Pacemakers are designed to restore the normal heart rhythm. Having a pacemaker neither increases nor decreases the risk of having a heart attack. They do not cure the underlying disease or condition. If the pacemaker stops functioning you may experience symptoms associated with your underlying condition or disease.

Your doctor can determine when you have abnormal or slow rhythm and when you will need medications and/or pacemaker.

Pacemaker implantation Procedure

The implantation procedure may take one to two hours depending on whether you will need single or two leads. It is usually done under local anesthesia.

A very small approximately 3 cm incision is made usually in the left upper chest area. An insulated wire called lead is inserted into a vein and the tip is advanced to a position inside the heart. The other end is connected to the pacemaker (pulse generator), which is placed under the skin in the upper chest just below the collarbone. Having the pacemaker creates little inconvenience – all you will see is just a small lump.

The pacemaker programming and adjustments can be done with out additional surgery with a computerized programming device that is actually a small computer. This computer can communicate with the pacemaker through a programming "wand", placed over the skin above the pacemaker.

Follow-up Care

Most of the patients go home the next day after implant. They resume many daily activities within few days or, at most, a couple of weeks. Pacemakers are checked periodically either at patient's home over the phone, physician's office or at the hospital.

It is very important to know what company manufactured their pacemaker and how to reach them. Always keep the pacemaker card given to you at the time of implant with you wherever you go.

Safety Precautions

New generation pacemakers have built-in safety features to shield them from electrical interferences. This includes almost all the electrical devices encountered in daily life, including most commonly used, microwave ovens.

Anti-theft detectors

Anti-theft security arches in stores and libraries operate on the principle of generating electromagnetic interference fields that can "sense" embedded "tags" on the merchandise or books being protected. If you have a pacemaker you should not stay close to the detection system equipment. It may be possible, under unique circumstances to affect the pacemaker function. However significant effects are uncommon to occur if you walk at a normal walking speed through the arches because the interference ends as you move away.

Airport security systems

Airport security systems are not likely to affect the pacemaker's operation but they will detect the metal of the pacemaker. Present your ID card to the attendant indicating you have a pacemaker. Ask to be cleared through a hand-held screening wand held away from the pacemaker, or request a hand search.

Cellular Phones

Today's pacemakers are engineered with the newest technology to resist cellular phone interference. However you should follow standard use guidelines developed by the industry:

- Hold the phone to the ear opposite the side of the pacemaker.
- Do not carry the phone in a breast pocket or on a belt over or within 6 inches (15cm) of the pacemaker.
- Maintain a distance of 6 inches (15 cm) between a hand-held cell phone and the pacemaker.

When to Replace or "Change Battery"

Pacemaker life varies depending on the type of pacemaker, how it is programmed and frequency of use. On average today's pacemakers may last for 5-8 years. The most common reason for replacement is when the battery begins to wear down. Because the battery is permanently sealed inside the pulse generator, the entire pulse generator is replaced. Your doctor will also check the lead (insulated wire) for proper monitoring of the heart's natural activity, and may choose to implant a new lead. If the lead does not need replacement, it is disconnected from the old generator and connected to the new one.

دمہ (ASTHMA) فرزند عامر ہاشمی

دمہ ایک بہت عام بیماری ہے جو بچوں اور بزرگوں کو ہوسکتی ہے۔ دمہ کے دورے کے دوران سانس کی نالیوں کا عارضی طور پر تنگ ہونا اور خصوصاً سانس باہر نکالنے میں تکلیف محسوس ہوتی ہے۔ دوروں کے درمیانی وقفے میں مریض کا سانس معمول کے مطابق ہوسکتا ہے لیکن اس کے باوجود مریض کو علاج میں کوتاہی نہیں برتی چاہیے کیونکہ علاج صحیح اور بروقت نہ ہونے پر دل اور ریویہیوڈوں کو نقصان بھی ہوسکتا ہے۔

بیشتر مریضوں کو دورے کا احساس اس وقت ہوتا ہے جب وہ کوئی بو چھرائھاتے ہیں، سخت جسمانی ورزش کرتے ہیں یا زینہ چڑھتے ہیں۔ بعض اوقات صبح بیدار ہوتے ہوئے یا چڑیا کی نجات کے زیر اثر بھی مریض سانس میں دقت محسوس کر سکتا ہے، دورے کی حالت میں مریض کو سانس باہر نکالنے کے لیے سینے میں تنگی اور ایک بو چھرائھانے میں سانس لینے میں سستی کی آواز اور کھانسی میں بلغغم محسوس ہوتا ہے۔ ایسی صورت میں اگر مریض آہیلر INHALER استعمال کرے تو فوراً سانس میں آسانی پیدا ہوگی اور جیلی جیسے بلغم کا اخراج ہوتا ہے۔ دمہ کی دو بڑی اقسام ہیں۔

۱۔ خارجی دمہ یا الرجک دمہ:

یہ عموماً بچوں میں زیادہ ہوتا ہے۔ ایسے افراد کو کسی بھی الرجی سے واسطہ کی صورت میں دمہ کا دورہ پڑجاتا ہے۔ یہ الرجی کسی بھی قسم کی ہوسکتی ہے مثلاً گھاس، زرگل، گھر کی دھول، عطریات، گھر میں موجود کیڑے مکوڑے، پرندوں یا جانوروں کے بال، اشیاء خورد و نوش (کھانے پینے کی اشیاء سے دمہ کے دورے کا امکان نہ ہونے کے برابر ہے)

۲۔ اندرونی دمہ:

یہ عموماً چالیس سال یا زائد عمر کے افراد میں ہوتا ہے۔ ایسے مریضوں کو دمہ کا دورہ مندرجہ ذیل صورتوں میں پڑ سکتا ہے۔

- ڈھنڈی ہوا میں سانس لینے سے
 - زور زور سے پھنسے یا رونے سے
 - نفسیاتی دباؤ
 - سینے میں انفیکشن
 - فلویا زکام
 - درج حرارت میں یکا یک تبدیلی
 - سخت جسمانی ورزش
- بعض اوقات یہ واضح نہیں ہو پاتا کہ مریض میں کس قسم کا دمہ ہے۔ پاکستان میں موٹی دمہ زیادہ دیکھنے میں آتا ہے۔ مریض میں دمہ کی علامات موٹی تبدیلی پر محسوس کی جاسکتی ہیں۔ اکثر خشک کھانسی ہوتی ہے جس کا دورہ عموماً رات کو ہوتا ہے۔ ایسی صورت حال میں کھانسی کی شربت اور اینٹی بائیوٹک سے کوئی افادہ نہیں ہوتا۔

دمہ ایک اچھوت بیماری نہیں لیکن اس کے موروثی ہونے کے امکان کا کافی زیادہ ہوتے ہیں۔ اگر والدین میں سے کسی ایک کو دمہ ہو تو اس بات کا 20% امکان ہے کہ بچوں کو بھی دمہ کی خشکایت ہوگی۔ اور اگر والدین (دونوں) کو دمہ کی خشکایت ہو تو یہ امکان بڑھ کر 30% ہوجاتا ہے لیکن ایک تجربے کے مطابق 65% دمہ سے متاثرہ افراد کے اہل خانہ کو یہ مرض لاحق نہیں ہوتا۔

بچاؤ اور علاج

دے کے ممکنہ دورے سے بچاؤ کے لئے مریض کو چاہئے کہ ذیل میں دی گئی احتیاطی تدابیر پر عمل کرے مثلاً

- گردغبار والے ماحول سے ممکنہ حد تک بچنے کی کوشش کرے۔
- گھر میں قالین، دریوں اور بیماری دریوں کا استعمال نہ کریں ان کو جلد از جلد دھوئیں۔
- گھر میں قبائلیں، دریوں اور بیماری دریوں کا استعمال نہ کریں ان کو جلد از جلد دھوئیں۔
- موسم بہار کے زمانے میں جنم باغات میں زرگل ہوں وہاں جانے سے اجتناب کرے۔
- خشک موسم میں سرد اور دھندلی ہواؤں سے خود کو ممکنہ حد تک بچائیں موسم کی تبدیلی کے دنوں میں خصوصاً احتیاط کرے۔ جسم کو مکمل لپیٹ کر باہر نکلے۔
- صبح جلد اٹھنے اور عصر کے بعد سونے سے گریز کرے۔
- اپنے ہاتھوں کو دن میں بار بار دھوئیں۔ ☆ فوراً کریں بعض اوقات مختلف اقسام کے کییمیائی مادوں کی تیز خوشبو، بد بو، شوٹا، اسپرٹ، پرفیوم، گھر میں کیڑے مارا دوائیات کا اسپرے وغیرہ دے کے دورے کا باعث بنتی ہیں، ان سے اجتناب کرے۔
- گھر میں دھول مٹی کے کام سے اجتناب کریں یا ماسک استعمال کرے۔
- پرانی کتابوں کو صفائی پرائے کہ پڑوں یا سامان کو دکالتے وقت احتیاط برتیں۔ Dusting کے بجائے گیلے کپڑے سے صفائی کریں۔
- پالتو جانوروں سے پرہیز کریں۔
- خورد و نوش کی وہ اشیاء جن سے الرجک ہوں مکمل پرہیز کرے۔
- باقاعدہ ورزش دمہ میں بہتر نتائج کا باعث بنتی ہے اور دورے کی تعداد میں کمی واقع ہوتی ہے۔ لیکن ورزش شروع کرنے سے پہلے اپنے معالج سے مشورہ ضرور کرے۔
- اپنے آپ کو ممکنہ حد تک فلویا زکام، بزلہ سے بچائیں اور فوری علاج کریں یا معالج کے مشورے سے فلویا vaccine بھی لگوا سکتے ہیں۔
- بہت زیادہ پھنسے، رونے یا دیگر جذباتی کیفیات اور ذہنی تناؤ دے کے دورے کا باعث بن سکتی ہیں۔ ذہن کو پرسکون رکھنے کی کوشش کرے۔

دے کے دورے کی معمولی علامات کی صورت میں بھی ڈاکٹر سے فوراً رابطہ کریں۔

دے کے علاج کے لئے مختلف ادویات استعمال کی جاتی ہیں جن میں آہیلر INHALER کا استعمال اب عام ہوتا جا رہا ہے۔ یہ جلد فائدہ بھی دیتے ہیں اور دوا کی بہت کم مقدار زیادہ اثر انگیز ہوتی ہے۔ ادویات کا انتخاب مرض کی علامات اور نوعیت پر منحصر ہے۔ علاج کے لئے مختلف اقسام کے آہیلر (Nebulizer) ناگی اسپرے۔ گولیاں۔ اسپرین استعمال کئے جاتے ہیں جو، Anticholinergics, Bronchodilators, پر مشتمل ہو سکتے ہیں۔

طب النبی ﷺ

- رسول اللہ ﷺ نے فرمایا، اگر کھانے میں برکت کم ہوتی ہے اس کے برعکس ٹھنڈے کھانے میں برکت زیادہ ہوتی ہے۔
- رسول اللہ ﷺ نے فرمایا، ایک ہی دسترخوان پر مختلف غذاؤں کھانے سے اجتناب کرو کیونکہ اس طرح کی غذا برکت نہیں ہوتی۔ رسول اللہ ﷺ نے فرمایا، خر بوزہ مثلاً کو صاف کرتا ہے، معدہ کو ہلکا کرتا ہے، جسم کی جلد کو تازہ رکھتا ہے۔
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- رسول اللہ ﷺ نے فرمایا، جو لوگ کھانے سے پہلے تھوڑا نمک چکھ لیتے ہیں وہ لوگ تین قسم کی بیماریوں سے محفوظ رہتے ہیں۔
- رسول اللہ ﷺ نے فرمایا، انار کرس جسم کے اندرونی حصے کو صاف کرتا ہے۔
- رسول اللہ ﷺ نے فرمایا، بڑا بیلوں دل اور دماغ کو قوت دیتا ہے۔
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- رسول اللہ ﷺ نے فرمایا، دن میں ایک بار رگس کا پھول سونگھنا اگر ممکن نہ ہو تو نغٹے میں، ایک ماہ میں یا ایک سال میں اور یہی ممکن نہ ہو تو زندگی میں ایک بار سونگھو۔ اس سے جزام، برس، اور جنوں کے مرض سے محفوظ رہو گے۔
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