

AROUND 15% OF PEOPLE IN THE WORLD, WHICH IS ABOUT 180 MILLION PEOPLE ARE AFFECTED BY ARTHRITIS.

## Understanding Arthritis

Arthritis is a disease that affects the joints of the body. It is an inflammation of the joints and there are over 100 types of the diseases affecting people around the world. The different people affected by arthritis either develop the symptoms associated with the disease gradually or suddenly. The disease is particularly predominant among adult woman above the age of sixty. However, cases have been seen in children and teenagers as well.

### SYMPTOMS TO LOOK-OUTFOR

Given that Arthritis affects the joints of the body, the most common symptoms associated with it revolve around joint pains and stiffness particularly in the morning. These may also be accompanied by the swelling of the joints, a reduction in the joint range of motion, as well as the skin around the joint becoming red. Some of these symptoms may occur after performing an activity that qualifies to be categorized as rigorous or above the normal level of intensity. When the experienced pain persists in such a situation, it is advisable to seek medical attention. You should also seek the doctor's advice:

i. The experienced pain is not associated in any way with an injury and goes on to persist for over a week.

ii. You experience back pains while and after lifting heavy objects and the use of pain killers and other remedies like applying heat do not bear any fruit.

iii. Your joints swell up and the swelling is not linked to any prior injury.

iv. You are feverish and feel unwell.

v. The muscle pains deter you from doing normal day to day activities.

vi. You experience night sweats or develop skin rashes.

vii. There is stiffness, swelling or pain in your joints.

Early diagnosis ensures that the disease is managed before further deterioration of the condition of the joints, therefore, ensuring that better results are achieved.

### THE DIFFERENT TYPES OF ARTHRITIS

As stated earlier, arthritis has over 100 different types based on a range of factors like how the disease has been caused. However, all these types can further be classified based on the symptoms exhibited by the patients.

#### I. INFLAMMATORY ARTHRITIS

As the name suggests, in this classification, tissue damage is caused by an inflammation occurring in and around the joints, therefore, causing pain, stiffness, and swelling. This kind of arthritis affects a number of joints in the body, and the most common forms

of it include:

- Rheumatoid Arthritis
- Ankylosing spondylitis
- Reactive arthritis
- Psoriatic Arthritis



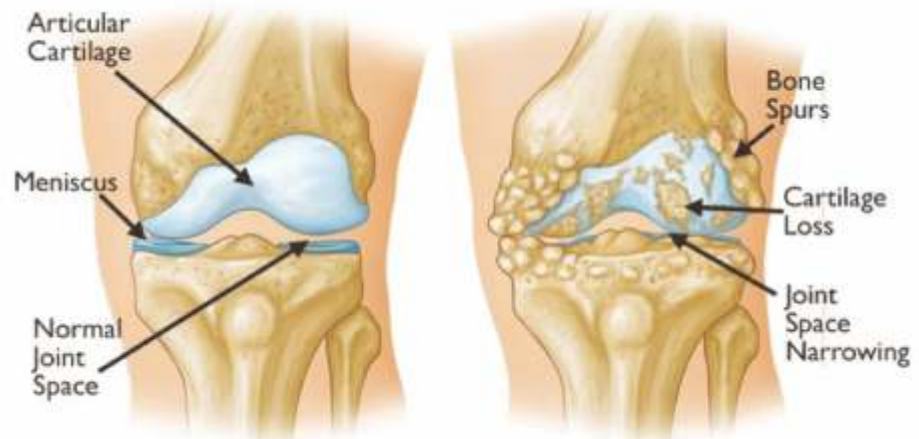
Photo Credits: Rheumatology Advisor

### WHAT ARE THE CAUSES OF ARTHRITIS?

#### II. DEGENERATIVE OR MECHANICAL ARTHRITIS

It occurs as a result of ageing or trauma resulting in wear and tear. Degenerative or mechanical arthritis is more common among the elderly and it particularly affects the knees, hips, the base of the thumb, as well as the big toe joint.

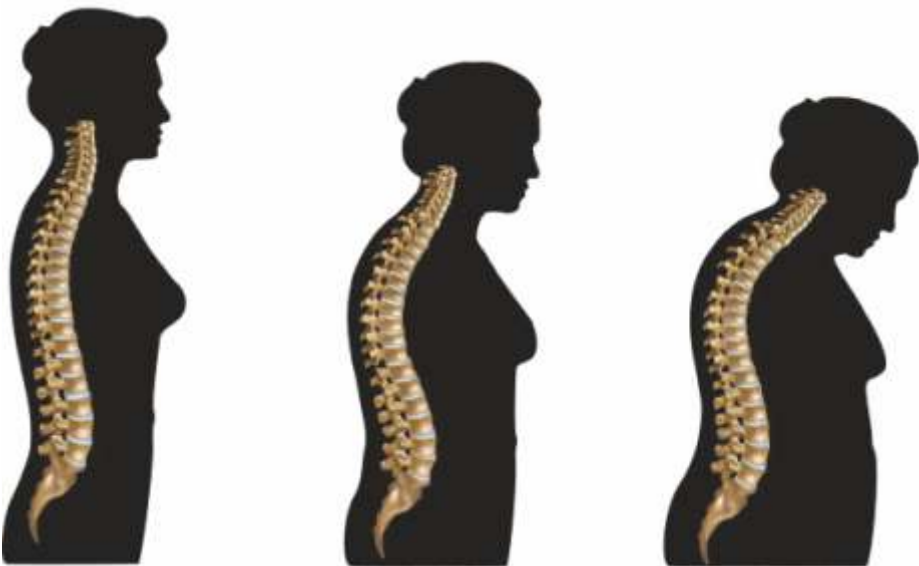
#### III. SOFT MUSCLE SKELETAL PAIN



This form of arthritis is accompanied by pain that is largely felt on the tissues than on the bones and the joints. This pain is usually a result of overuse or injury to a particular part of the body.

#### IV. BACK PAIN

Back pain is a very common problem among many people in the world due to a number of factors such as sedentary lifestyle that most people are



adopting. Back pain can be associated with muscles, discs, ligaments, bones and

joints. The pain may be as a result of problems related to other organs inside the body or as a result of a degenerative condition like Osteoarthritis or Osteoporosis or Inflammatory Arthritis like Ankylosing

disease affects the elderly and women more often, it can still affect people of all ages and gender. Also, regardless of race and job type, arthritis can still affect you.



### WHAT ARE THE CAUSES OF ARTHRITIS?

#### II. TREATMENT

Arthritis can be caused by a combination of different factors which include:

i. Genetic – most types of arthritis are genetic and run in the family.

ii. Lifestyle – people whose lifestyle involves little physical activity or a lifestyle that is physically demanding may be at risk factor.

iii. Environmental factors – having had a previous injury or infection as well as

smoking.

### WHAT ARE THE TESTS AND THE TREATMENTS AVAILABLE?

#### I. TESTS

There are a number of tests that can be recommended by Rheumatologists in order to make a comprehensive diagnosis on the severity and extent of damage caused by the disease. These tests are as

#### VI. GOUT

Gout comes about as a result of the deposition of uric acid crystals within the joint and it mainly affects the joint at the base of the big toe. The condition is extremely painful.

#### VII. SEPTIC ARTHRITIS

This is a result of an infection within the joint itself.

### WHO CAN GET ARTHRITIS?

diagnosis, monitoring and treatment of arthritis.

• X-Rays – they make it possible to view the extent of damage and bone abnormalities.

• MRI Scans – used to view soft tissues, inflammation and the early detection of problems.

• CT scan – this is a more detailed approach as it gives clear images of the skeleton and other tissues.

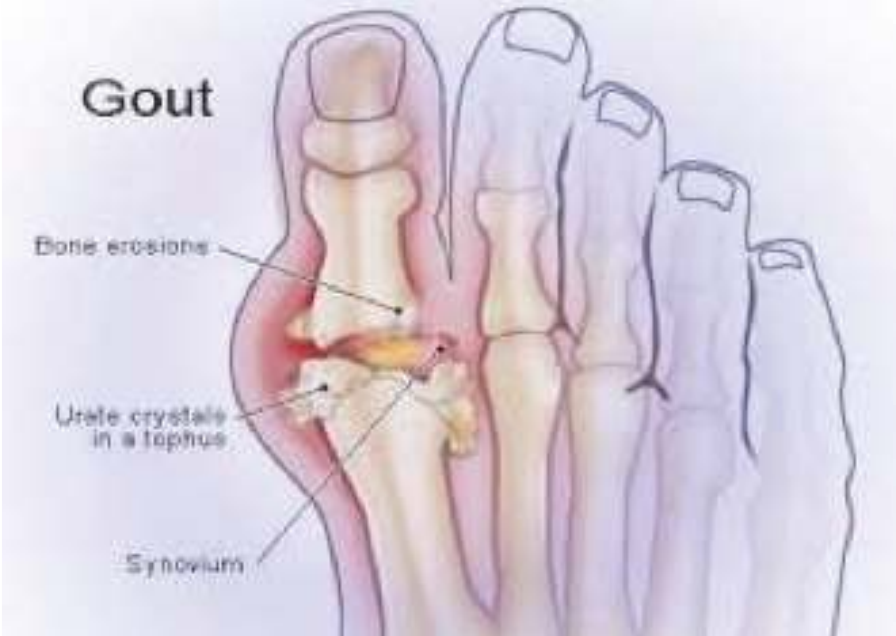
• Ultrasound – it helps in the detection of inflammation around joints (synovitis).

• Synovial Fluid Analysis – analyses the lubricating fluid from the joints and the results are used to diagnose inflammation, gout, and infection.

drug therapies are used for two main reasons:

1. To take care of the pain and stiffness caused by the disease. Painkillers, anti-inflammatory drugs are administered to the patient.

2. To take care of the inflammatory disease and to improve the outcome of the



treatment, disease modifying anti-rheumatic drugs together with biological therapies are administered to the patient.

#### • Arthroscopy and Arthroplasty

Arthroscopy is a surgical procedure that is used to visualize, diagnose and treat ailments in the joint. The procedure is carried out by orthopedic surgeons who

make a small incision on the skin of the patient and using pencil-sized instruments the surgeons gain access that enables them to view the different structures inside the joint. This is made possible by the instruments they use which contain a lighting system and a small lens. The arthroscope is very important

The surgery ensures that the damaged cartilage and the bone are removed and a prosthesis, which is an artificial equivalent is used as a replacement. Different prostheses types are available based on the age, bone quality, already existing deformity, activity profile, as well as the expected range of

motion of the joint and its longevity.

**- Dr. Sonal Mehra**  
MD (Internal Medicine), DM  
(Rheumatology & Clinical Immunology)  
Associate Consultation - Rheumatology  
Jaypee Hospital, Noida

#### • Joint Replacement

This is a treatment procedure where the degenerated joint is removed and an artificial replacement is used in its place. Joint replacement is more common for the hip and knee joints.




## Our rheumatology department is stronger than ever.

Jaypee Hospital is equipped to deal with all Rheumatological disorders. We offer state-of-the-art Rheumatology services backed by one of India's best Rheumatology team.

**Disorders treated:**

- Systemic Lupus Erythematosus (SLE)/Lupus
- Anti-phospholipid Antibody Syndrome
- Rheumatoid Arthritis
- Crystalline arthropathies: Gout/CPD
- Spondyloarthropathies: Ankylosing Spondylitis/Psoriatic

**Arthritis**

- Primary Sjogren's Syndrome
- Scleroderma (Systemic Sclerosis)
- Vasculitis
- Behcet's Syndrome
- Fibromyalgia
- Dermatomyositis/ Polymyositis

- Metabolic Bone Disease
- Osteoporosis
- Osteoarthritis
- Juvenile Idiopathic Arthritis
- Auto-inflammatory Syndromes
- Paediatric Rheumatology
- Primary Immunodeficiency Disorders

**Services:**

- Biological Therapies
- Soft Tissue Injections
- Ultrasound Guided Joint Biopsy Injections

For appointments/queries please call: 901 536 5535



Jaypee Hospital, Sector 128, Noida 201304, UP, India | 0120 412 2222 | [www.jaypeehealthcare.com](http://www.jaypeehealthcare.com) | Follow us






# Understanding Heart Attack

One of the leading causes of death is heart attack, which implies problems with the heart and vessels supplying blood to the heart muscles. There's no one cause for heart attack, but there are risk factors that increase the chances of developing it. The more risk factors you have, bigger is risk of a heart attack. Hence it is important that we understand what affects your heart so that you can take preventive measures to keep it healthy.

- Physical inactivity
- Unhealthy diet
- Uncontrolled high blood pressure
- Smoking
- Uncontrolled high cholesterol levels
- Obesity and being overweight

## SYMPTOMS OF A HEART ATTACK

There are certain signs and symptoms that need to be observed and immediate action should be taken to save the patient's life.

- Pressure, ache or a squeezing sensation in the chest or arms that can spread to your neck, jaw or back
- Nausea, indigestion or heartburn
- Shortness of breath
- Cold sweat
- Fatigue
- Light headedness or sudden dizziness

## IMMEDIATE ACTION:

If you see in someone the symptoms of a heart attack or if he/she has fallen unconscious due to a heart attack, immediately call for emergency medical help.

## RISK FACTORS THAT CAN LEAD TO A HEART ATTACK

Our heart is the size of our fist and the habitual risk factors make it vulnerable to numerous conditions that can affect its functioning and lead to cardiovascular diseases. Risk factors like family history, diabetes cannot be outdone but factors associated with lifestyle can be modified. Like:

- Make sure the patient is lying on his back on a firm surface. Kneel on the side and place the heel of your hand on the center of the chest.
- With straight arms, cover the first hand with your other hand and interlock the fingers of both together. Fingers should be raised and not touch the patient's chest or rib cage.
- Lean forward with your shoulders directly over the person's chest and press down about two inches. Release the pressure, but not your hands, and let the chest swell back upwards.
- Repeat to give 30 compressions at a rate of 100 - 120



trained in CPR, doctors recommend performing only chest compressions.

If you have been trained in CPR, you can go on to opening the airway and rescue breathing.

## DIAGNOSIS AND LINE OF TREATMENT

There is no single test to diagnose cardiovascular diseases. Electrocardiogram (ECG), Echocardiography, Cardiac Enzymes (troponin) and Angiography can help in diagnosing heart attacks. Treatment includes medication and interventions like:

## •CORONARY ANGIOPLASTY AND STENTING

A cardiologist traces the blockage and use the minimal invasive technique to release the blockage and restore the blood flow to the heart.

Post-procedure, the hospital focuses on cardiac rehabilitation, which involves a holistic program that helps patients to restore to normal daily activities through medication, lifestyle changes, emotional counseling and drug therapy.

**- Dr. B. L. Agarwal**  
Associate Director –  
Interventional Cardiology  
Jaypee Hospital, Noida

# Health Tests Every Father Should Get



Fathers generally ignore their own health, as they are busy looking after the rest of their family. Ignoring pains, popping pain killers and working tirelessly takes a toll on their health.

In the present day scenario, stress, pollution, lack of exercise, junk food, smoking and alcohol are all adding to the health issues. These lifestyle changes have heralded a steep rise in diseases like hypertension, diabetes and obesity, eating away gradually into our healthy life. Therefore, here are a few preventive steps that can be taken.

## 1. BLOOD PRESSURE

Caused by increasing pressure exerted by blood within the blood vessels. If unchecked, leads to heart ailments, strokes and kidney failure. A father should regularly monitor his blood pressure. He should also cut down on salt intake.

## 2. BLOOD SUGAR

This has become a global epidemic, with millions getting diabetes these days. Fathers should check their blood glucose regularly to prevent heart disease, kidney failure and eye – related problems.

## 3. CHOLESTEROL

To maintain a healthy lifestyle, keeping cholesterol under control is very important. Again, if left unchecked it will lead to heart problems and strokes. So, one needs to check their lipid profile yearly.

## 4. BONE DENSITY

Although osteoporosis was thought to be more prevalent in women, it is highly prevalent in male population too these days. Check your bone strength by checking bone density.

## 5. PROSTATE CANCER

The checking of prostate cancer as a routine has become controversial, with studies showing that preventive checks may do more harm than good in these people. However, in the right setting and in families with history of prostate cancer, it would be worthwhile to screen for cancer in fathers above 40 years of age.

## 6. VACCINES

Adult vaccination is a must, specially for fathers above 60 yrs of age, and those with co-morbidities like diabetes. Vaccines can be given for influenza, hepatitis and pneumonia.

## 7. AUDIOGRAM

This test measures hearing loss, which may not be evident at early stages.

## 8. EYE TEST

With age, eyesight deteriorates. Visit your doctor regularly for eye tests.

## 9. ECG/STRESS TEST

Fathers should conduct these tests once after 30 yrs of age to look for any heart ailments. One can repeat these tests at an interval of four to five years.

## 10. DENTAL CHECK-UP

As we grow old, our jaw bones and teeth get weaker. Getting regular dental check ups would help in preventing gum disease, oral cancers and tobacco chewing related issues.

## 11. COMPLETE BLOOD COUNT

It is a basic test to rule out anaemia and blood related issues.

All these tests form a crucial part in determining your overall health as a father. So, if you really love your family, please do not ignore your health. Go for a health check up now.

**- Dr. Vinay Labroo**  
MD (Internal Medicine)  
Additional Director -  
Internal Medicine  
Jaypee Hospital, Noida

# Understanding Breast Cancer:

Cancer is the disease of the cells, wherein the cells divide and die out causing abnormality in blood or lymph fluids or a lump called tumour. Breast cancer is the abnormal growth of the cells lining the breast lobules or ducts. This uncontrollable growth can also spread to other parts of the body. Among the cancers affecting women health, breast cancer

more young women are falling prey to breast cancer due to lack of awareness or unavailability of proper diagnostic facility.

## STAGES AND TYPE

Breast cancer is caused by genetic abnormalities that happen as a result of the ageing process and the wear and tear of life in general.

etc. Increases the risk. Breast cancer stage is determined on a scale of 0 to 4 — with stage 0 indicates non-invasive cancers that remain at the original location and stage 4 indicates invasive cancers that have spread to other parts of the body.

## SYMPTOMS:

It is important for every

symptoms and the cancer is detected during a mammogram or a physical examination by a doctor. Symptoms of breast cancer could be:

- Changes in size and shape of the breasts
- A lump or thickening in either of the breasts
- Crusting, sores or ulcers, redness or scaly appearance on nipple
- Changes in colour of the nipple
- Swelling or discomfort in the armpit
- Persistent, unusual pain that persists even after the menstrual cycle Most breast changes aren't always due to cancer. However, if you observe the slightest of change, it is best to see a doctor.

## DIAGNOSIS

• Self-examination:

A woman can consult a doctor and understand the technique of self-examination and what are the symptomatic changes that can occur in the breast. For self-examination stand in front of a full-length mirror and follow as instructed by the doctor.

• Mammogram

It is the most effective way to detect breast cancer. Mammograms can trace lumps at a very early stage, even before the lumps can be detected by physical examination. It is suggested that woman above the age of 40 or 45 should go for screening once every 2 years.

However, these are preliminary measures. The only way to confirm cancer is through a biopsy. Right screening at the right time can ensure early detection, which can become a huge factor in the cancer treatment and the survival of the patient. Awareness and timely consultation are two main factors that can help women.

**- Dr. Pawan Gupta**  
Additional Director –  
Surgical Oncology  
Jaypee Hospital, Noida



ranks on the top, with the rate as high as 25.8 per 100,000 women and mortality of 12.7 per 100,000 women, according to health ministry. The situation has become worrisome because more and

What exactly triggers this cannot be stated. However certain factors like obesity, hormonal imbalance, exposure to radiations, age, family history, delayed menopause

woman to be aware of these symptoms and they should seek immediate consultation if any abnormalities or changes are observed in the body. However, there are cases when some people have no

# Computer Navigation Knee Replacement

Over the years technology has transformed healthcare and one boon has been the Computer Navigation or Computer Assisted Surgery for Total Knee Replacement (CAS-TKR). This technique was developed to improve the accuracy and precision and in the case of TKR, it results in reducing the outliers of alignment.

The setup majorly consists of three components: computer platform, tracking system, and a rigid body marker. The tracking system is in sync with the body markers and tracks their motion with the help of computer processing within the three dimensional space. The surgical procedure is initiated with an infrared sensor marking the process to map the anatomy of the arthritic knee and adjacent femur and tibia of the bone structure. Once the machine accurately measures the position of the knee, the adjacent spaces detects the deformity of the bone, the surgeon uses the navigation tools to perform the surgical procedure and changes need to be made via bone cuts and ligament balancing so as to position the new artificial knee in the proper anatomic alignment.

This process is accurate because the computer captures a 3D image of the knee before and after the



surgery. The surgeon then interprets the dimensions, the images and the data to ensure maximum precision. Maximum accuracy means that the patients can regain much better bone function and mobility post-recovery. The incision for surgery is very small and the dissections are minimally invasive which assures better protection for the muscles and tendon that hold the knee.

Earlier the standard method for aligning the bones was using an intramedullary rod, in the case of CAS-TKR the alignment is achieved by accurate marking and this not only improves position of the knee implants, but it reduces

the percentage of error to almost zero, thus enhancing the performance and outcome of the surgical procedure.

This technique not only helps to improve the position of implants during knee replacement surgery, but it can also enhance surgical performance and help reduce errors. With better precision, the surgical cuts are minimal and can be individually administered as per the condition and need of surgery. This reduces the loss of blood, faster recovery and lesser hospital stay.

*Institute of  
Orthopaedics & Spine  
Jaypee Hospital, Noida*

## Specialised clinics for specialised treatments.

Diabetes Clinic	Monday to Saturday 10 am to 1 pm	Headache Clinic	Every Saturday 2 pm to 4 pm
Thyroid Clinic	Every Friday 10 am to 1 pm	Epilepsy Clinic	Every Friday 11 am to 3 pm
Asthma Clinic	Every Saturday 11 am to 2 pm	Vision Clinic for Children	Monday to Saturday 9 am to 5 pm
Breast Cancer Clinic	Every Thursday 10 am to 2 pm	To book an appointment, please call 0120 412 2222	

\*Prior appointment mandatory

**Now you can consult the doctor after work for all your health concerns.**

**Evening OPD by specialists available between 5pm - 7pm**