# Welcare TODAY

## LIVE RIGHT, LIVE HEALTHY

A Patient Education Initiative by 'Arthritis Foundation'



# **Lab & Other Tests: A Crucial Part of Treatment**

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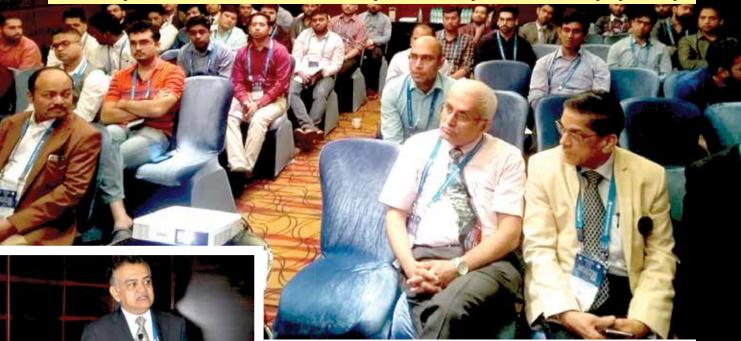






# Dr Mody is a much Sought After Teacher...

Dr Mody addresses Conferences in Pune [Maharashtra] and Neemrana [Rajasthan]



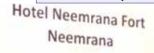
doctor, the number of invitations for him/her to teach other members of his Replacement [TKR] surgery. profession is surely a measure of his/ her professional expertise.

recent annual meeting at Pune had re- ident of IAA.

The measure of professional experquested Dr Mody to take up a debate tise is the demand it attracts. For any topic related to the most scientific way of aligning the knee during Total Knee

Later in the month Dr Mody was also invited as one of the keynote speak-This is best exemplified by the num- ers by the Indian Arthroplasty Assober of requests and invitations which ciation (IAA) at its 15th annual confer-Dr Mody receives every month to ence. More than 15,000 orthopaedic lecture at national and international surgeons who had attended these two conferences. The Maharashtra Or- conferences benefitted with Dr Mody's thopaedic Association (MOA) in its teaching. Dr Mody is also the past pres-

Below: Dr Mody addressing the delegates of the 15th IAA Conference at Neemrana



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## **Welcare TODAY**

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Do you have any query about any medical illness? Are you in two minds about getting a medical treatment? Please email to us. Welcare Hospital's Medical **Specialists** will help solve your dilemma.

> તબીબી સલાહ માટે અમારો સંપર્ક જરૂર

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શં કોઈ બીમારી માટે કઈ સારવાર લેવી તેની મુંઝવણમાં છો ? વેલકેરના નિષ્ણાત તબીબોની નિઃશલ્ક સચોટ સલાહ માટે ઇમેલ કરશો.



## Welcare Hospital

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## **Blood Tests: A Very Effective Weapon**

If Health is our Friend, and Ill-health is our Enemy, then we need to understand all the weapons which we might have to fight our enemy! In general, the perception in society is that our main weapons in this fight are either drugs/ medicines or sur-Doctor informs gery.

patient of However, one results & would be surimplications prised to know that Doctor perhaps the most interprets effective weapon results which medical science has are blood tests, and other such laboratory based tests and investigations.

In fact, whilst most of the times the weapons of medicines and surgery are used only when the enemy of Illhealth has already struck us, the weapon of laboratory tests can be used to prevent

Diagnosis & treatment decisions made by doctor & patient

**Patient** goes to the doctor

The Life

Cycle of a

**Lab Test** 

Clinical

Doctor orders lab test

> Specimen taken

> > Specimen

transferred to clinical laboratory Tests analyze specimen

lab provides results to & produce the doctor results

from striking us! Modern day laboratory science offers us a wide range of tests which if done periodically, can help us pick up vulnerabilities to different diseases much before they become established.

Health check-ups do not cost much and yet they can help you save not only your life but also your money by picking up a problem early and solving it early, thereby limiting the ultimate cost.

The problem lies in the fact that members of our society are not aware of the importance of different blood tests.

In this issue, we have tried to educate our readers on the meaning and importance of different categories of blood tests. We hope you will find it useful.

# Continuous Training even in Minor Skills

Patient beds are sophisticated biomedical equipment and help in nursing care as well as during Cardio Pulmonary Resuscitation [CPR] if ever required.

Patient beds are never static platforms with a flat surface. Patient beds can be moved, rotated, folded and tilted in many positions with the help of electric motors and hydraulics.

When new beds are acquired, as was done in Welcare Hospital recently, the concerned staff is given extensive training to proper handle these sophisticated equipment. Such training are greatly useful during crisis situations like but if a patient suddenly suffers cardiac arrest and needs CPR. The bed can be made flat and low with only one red button!



Above: typical patient bed. Below: Staff is regularly imparted training about the use of electronic patient beds



# Laboratory and other Tests: Part - 1

Blood tests are Vital part for Medical Treatment and help in Diagnosis and Progress

We present the first of a series of articles on Medical Diagnostic Testing in the Laboratory and Imaging Departments

#### What are lab tests?

Lab Tests are tests done during Medical or Surgical Treatment. Laboratory tests are done on samples of:

- · Blood & Urine
- Phlegm or Sputum
- Cerebrospinal fluid
- Pleural fluid Body Tissues in biopsy
   Important Lab Test Profiles

A 'Single' test is rarely done. Most tests are done on automated machines and give multiple parameters. Hence these tests are known as 'Profiles' of an organ like kidney, liver or the different types of cholesterol levels. Following are some of the important Test Panels.

#### **Complete Blood Count**

Also called Haemogram, it shows the Overall well-being of any individual through this simple and widely used test: Complete blood count is also called CBC...

#### Diabetic Screen

Blood sugar testing for diabetes is not enough. HbA1c or glycosylated haemoglobin test provides a precise and a broader picture of the overall glucose control for the last 120 days.

#### **Lipid Profile**

Though lipids are important for survival, their high values can lead to blockage of various blood vessels, which ultimately results in serious conditions like a heart attack or CV Stroke. Hence, early detection is advisable so treatment may be started early.

#### Liver Profile

Liver, known as body's chemical factory, performs several functions ranging from converting complex molecules to simpler units, synthesis of immunoglobulins and various other biomolecules essential for fighting infection and injury. Tests included in this profile indicate liver health.

#### Kidney Profile

Kidneys play an important role in maintaining the fluid and electrolyte balance by retaining the required substances and excreting undesired substances in the urine and maintains the acid base balance of the blood. It also plays a vital role in regulating blood pressure by reabsorption and excretion of electrolytes and regulates the workload on heart. Tests included show kidney health.

#### Iron Deficiency Profile

Deficiency of iron may lead to anaemia, and thus detection of iron levels becomes important. Anaemia is caused

when the red blood cells cannot supply adequate oxygen to the cells, and is tested by haemoglobin levels.

#### **Serum Ferritin**

High levels of ferritin indicate iron storage disorder (haemochromatosis) whereas low levels of ferritin indicate iron deficiency (anaemia).

#### **Thyroid Profile**

The main function of thyroid gland is synthesis and secretion of thyroid hormones; Thyroxine (T4) and Triiodothyronine (T3), circulate in the body through the bloodstream and aid in overall body metabolism. The secretion and regulation of thyroid hormones is controlled by another hormone called TSH (Thyroid Simulating hormone) which is secreted by the pituitary gland. Over and under production of thyroid hormones can cause hyperthyroidism and hypo-thyroidism. Imbalance in either of the thyroid hormones can lead to disorders which affect various metabolic activities and functions in the body.

#### Cardiac Risk Markers

Cardiac markers are indicators for cardiac stress or damage, which are used for diagnosis and risk assessment of cardiovascular diseases along with evaluating heart's function. This profile evaluates the vulnerable functioning of heart along with the overall well-being.

#### Homocysteine

Homocysteine is linked to increased risk of premature coronary artery disease, stroke, thrombo-embolism. Alzheimer's disease, osteoporosis, venous thrombosis, schizophrenia, cognitive deficiency and pregnancy complications etc.

Other reasons for homocysteine variation are increasing age, genetic traits, drugs, renal dysfunction, deficiency of vitamins or smoking. Homocysteine is an important blood test.

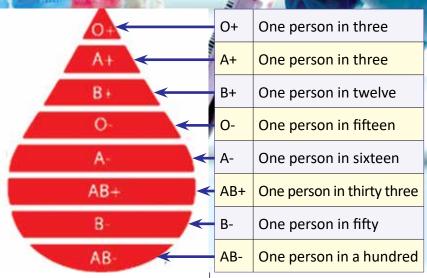
To be continued with more information about lab and other tests. Please remember, your doctor is the best judge to decide your tests.



#### Blood Grouping: A MUST TEST for every individual as soon as possible after birth...



Blood Group is perhaps one test which must be done on every person as soon as possible after birth. It should be written on a good paper or card and must be carried by everyone. Once done, it need not be repeated ever in life... Remember, knowing blood group saves lives if and when blood needs to be transfused in an emergency. Shown below is the frequency of various blood groups; if your group is a rare group, please donate blood regularly...



## Different Departments of a Pathology Laboratory for different types of Tests

A modern pathology laboratory is a service provider equipped with highly sophisticated medical testing equipment and staff. Although thought to be a single entity, each and every laboratory will have nearly all of the following sub departments. Every good laboratory will be NABL accredited to ensure Quality.

## Microbiology

Testing clinical specimens like stools, urine, blood, sputum, cerebrospinal fluid, and synovial fluid, as well as possible infected tissue to find whether disease causing bacteria exist. Also, sensitivity testing to find the best medicine to kill the bacteria.

#### **Parasitology**

Specimens are examined for parasites. For example, stool samples may be ex-

amined for tapeworms or hookworms.

#### Virology

is concerned with identification of viruses in specimens such as blood, urine, and cerebrospinal fluid.

#### **Hematology**

Analysis of whole blood specimens to perform blood counts, examination of blood smears, checking for Malarial parasites etc.

## Coagulation testing

Done especially before surgery. Counts blood clotting times, coagulation factors, and platelet function.

#### Clinical Biochemistry

Dozens of different tests on serum or plasma on automated equipment; e.g. lipids, blood sugar, enzymes, and hormones.

#### **Toxicology**

Focused on testing Urine and blood for drugs and alcohol etc.

## Immunology/Serology

Uses antigen-antibody interaction for diagnosis. Compatibility of transplanted organs may also be determined with these methods.

#### **Immunohaematology**

Determines blood groups, and performs compatibility testing on donor blood and recipients. It also prepares blood components, derivatives, and products for transfusion.

## Urinalysis

Tests urine including microscopy.

## Histopathology

Processes solid tissue removed from the body (biopsies) for evaluation at the microscopic level.

## Cytopathology

Examines smears of cells from all over the body (such as from the cervix) for evidence of inflammation, cancer, and other conditions.

## Molecular diagnostics

Specialized DNA analysis tests.

## Cytogenetics

For diagnosis during pregnancy about diseases like Down's syndrome or some cancers identified by abnormal chromosomes.

## Surgical pathology

Examines organs, limbs, tumours, fetuses etc taken out during surgery.

# Rheumatoid Arthritis: Much Beyond Joints...

Rheumatologist Dr Vivek R Mehta explains a condition which is often misunderstood



Myth - Rheumatoid Arthritis (સંધિવા) is a disease affecting only joints.

Reality - It is a disease of the autoimmune system and can involve other parts of the body like lungs, eyes, etc.

Rheumatologist -A specialist who has in-depth knowledge of these diseases and therefore can offer a comprehensive treatment.

Rheumatoid arthritis is often thought to be a disease of joints. Rheumatoid thritis does effect ioints more commonly but it can affect almost any organ of the body. I like to tell my patients that rheumatoid arthritis is a disease of immune system that can affect almost

any organ of the body, with most common manifestation being joint pains.

Diptiben, pictured here, was very kind to share her picture and story to spread knowledge about rheumatoid arthritis. Diptiben had nonspecific pain for more than a few years but like many of us she ignored it initially. Eventually she needed a procedure on her knee to help reduce the swelling and pain, which eventually led to diagnosis of rheumatoid arthritis. However, her rheumatoid arthritis remained poorly controlled. She eventually presented to the Welcare Hospital with breathing dif-

> ficulty, severe pain and swelling. She was diagnosed as having worsening of rheumatoid arthritis and started on treatment for the same which made remarkable difference in pain. She underwent a chest x-ray to look for the reason of shortness

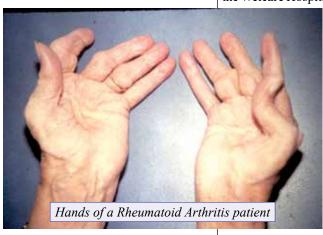
of breath, which showed me certain changes concerning lung involvement of rheumatoid arthritis. We decided on obtaining a specialized CT scan to evaluate these changes which could have otherwise been missed. CT scan showed nodules likely from rheumatoid arthritis and changes relating to a rare side effect of methotrexate. She was effectively treated and is closely being followed as an outpatient now.

Diptiben's story is a great reminder about why rheumatoid arthritis needs close follow up and treatment by a rheumatologist. Rheumatologists treat many immune system related disorders like rheumatoid arthritis, psoriatic arthritis, gouty arthritis, spondyloarthritis, vasculitis, lupus, scleroderma etc. Treatment of these diseases have completely changed in past 10-15 years and new treatments are coming out every year. It is important to stay ahead of these diseases so we can prevent development of complications and if someone already has complications further damage can be stopped with timely intervention.

## When to see a Rheumatologist?

- · Joint pain, back pain or other musculoskeletal pain that does not improve within 3-4 weeks, especially if its worst in the morning.
- Unusual sensitivity to sun, rash, oral ulcers, hair loss etc which can suggest
- · Fevers for which other infection related reason cannot be found.
- Skin thickening, unusual sensitivity of fingers to cold and stress.
- Unusual and progressively worsening muscle weakness and/or rash.
- Other multi-system disorders which you or your doctor think could be immune system related disorders.

Dr Vivek Mehta's consulting days in Welcare Hospital are: Wednesday & Friday 10:00 AM to 1:00 PM Appointments **2** 0265 2337172



Dr. Vivek R. Mehta Consultant Rheumatologist

MD, Internal Medicine (USA), Rheumatology (USA). American Board of Centre, New York. He has published certified. After medical graduation, many medical articles and abstracts Dr Mehta did his masters in Medicine at international conferences.

at Mercy Catholic Medical Centre, Pennsylvania. Later he took training in Rheumatology from Albany Medical

# આર્થોસ્કોપી : ઝીણા કાપા વાટે મોટી સર્જરી

<u> રોજિંદા જીવનમાં નડતા ખભાના રોગોની દૂરબીન વડે થતા અત્યાધ</u>નિક નિદાન અને સારવાર વિશે માહિતી

#### સાંધા

સાંધા એટલે આંગળીઓ ચાર અલગ અલગ એક્સીસ પીઠ. માથં. વગેરે અવયવ હલી શકે તે પર હલી શકે છે અને તેજ છે માટેનો અવયવ છે. શરીરમાં તો નાી નાના મોટા એવા અનેક



ખભાના સાંધાની રચના ઉપરોક્ત ચિત્ર પ્રમાણે હોય છે

જેવા(મિજાગરા), બૉલ એન્ડ સોકેટ જેવા (જેમા એક હાડ્કું કપ જેવું હોય અને તેમા બીજું

બૉલ જેવું હાડ્કું ફીટ થાય છે) સાંધા હોય છે

#### સાંદ્યાની બીમારીઓ

અને હાડકાના ઘસારા, ઇજા (ફ્રેક્ચર), ગાંઠ, સાંધા ઉતરી જવા (ડિસલોકેશન) અને • ક્રિકેટમાં જન્મથી સાંધામાં ખોડખાપણ વગેરે તકલીફો હોય છે જેની મારવાર ઑથોપેડિક સર્જન્સ કરે છે.

## 'યુનિક' સાંધો

એટલે એક અજાયબી સાંધો છે. આમ બધા મિજાગરા જેવા સોકેટ (બોલ ને પકડી રાખતો સાંધા એકજ ઘરી (એક્સીસ) પર હલી શકે છે, દા.ત. હાથની આંગળીઓના સાંધા આ બૉલ એન્ડ સોકેટના

'યુનિક' વાત. ખભાનો સાંધો કઈ રીતે હલે છે તેની ટુંકી માહિતી આ પ્રમાણે છે…

- કોણી શરીરથી દર કરવી
- કોણી આગળ અને પાછળ કરવી
- સાંધાની અંદર કુર્ચાના કોણી શરીરને ચોટાડી ફક્ત કાંડ્ર આગળ અને બાજુમાં હલાવવું
  - બૉલર જેવી એક્શન કરવી (સર્કમડક્શન)

## બૉલ અને સોકેટ

ખભાનો સાંધો બૉલ અને સોકેટ પ્રકારનો સાંધો છે. બધા સાંધામાં ખભાનો સાંધો બૉલ હોય છે હાથના હ્યુમરસ નામના હાડકાના છેડે અને અવયવ) હોય છે સ્કૅપ્યુલા નામના ખભાના હાડકામાં.

જે ફક્ત એકજ એક્સીસ પર કારણે જ ખભામાં આટલી હાથપગ, હલે છે. પણ ખભાનો સાંધો હિલચલ શક્ય બને છે.

#### ડિસલોકેશન

પ્રકારનં અસાધારણ હલનચલન કરી આ સાંધામાં એકજ ખામી છે… અને એ છે કે ખભાનો સાંધો ઉતરી શકે છે. તેને Dislocation (ડિસલોકેશન) કહેવાય છે.

#### भ्रोअन शोस्डर

જો ખભાને જોઈતા પ્રમાણમાં હલનચલન ન મળે અને ખાસ કરીને ડાયાબિટીસના દર્દી હોય. તો ખભાનો સાંધો ધીરે ધીરે જકડાઈ જાય અને હલાવો તો ખબ દુઃખાવો થાય. તેને ક્રોઝન શોલ્ડર કહે છે.

## રોટેટર કક ટિચર

રોટેટર કફ ટિયર કહેવાય છે. રોટેટર કફ એટલે એક સ્નાયુઓનો જથો કે જે

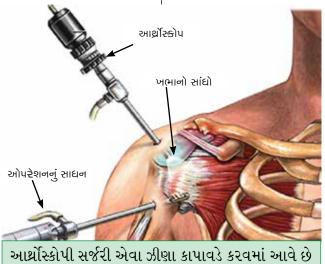
ખભાને ફેરવવાનં એટલે 'રોટેટ' કરવાનં કામ કરતા હોય છે. આ ઇજામાં ખભો એકજ દિશામાં ઉંચો થતો શકતા હોય છે અને તે પણ ફક્ત સહાયતાથી જ હલી શકતો હોય છે.

#### સારવાર

દવા અને કસરત વડે ઘણા કેસ સાજા થાય છે પણ ગંભીર ઇજાનો કાયમી ઇલાજ આર્થ્રોસ્કોપીક સર્જરી છે.

વેલકેર હૉસ્પિટલના પ્રમખ ઓર્થોપેડિક સર્જન ડૉ ભરત મોદી આ પ્રકારની સારવાર ના નિષ્ણાત છે અને તેઓ હજારો સફળ આર્થ્રોસ્કોપી સર્જરી નો અનુભવ ધરાવે છે.

આવી સર્જરી માટે ખાસ ખભાને હલાવતા સ્નાયું સાધનોની જરૂર હોય છે. ક્યારેક ફાટી જાય છે. તેને ખભાની ખરાબમાં ખરાબ ઇજા અને બીમારીઓની વેલકેર હૉસ્પિટલમાં નિયમિત રીતે ઉત્કૃષ્ટ સારવાર થાય છે.



# વેલકેર હોસ્પિટલનો સ્વાસ્થ્ય અધિકાર દિવસ

દર મહિનાના ઘોષીત શનિવારને સ્વાસ્થ્ય અધિકાર દિવસ તરીકે ઉજવાશે



વિનામુલ્યે સેવાઓ: હાડકા અને સાંધાના રોગોનું ચેકઅપ, એક્સ-રે તપાસ અને જનરલ મેડિસીન રોગોની તપાસ. વહેલા તે પહેલા દ્યોરણે રજ્ઞસ્ટ્રેશન. ફોન -૦૨૬૫ ૨૩૩૭૧૭૨ સરનામું : વેલકેર હોસ્પિટલ, અટલાદરા વડસર રોડ, વડોદરા.

એપોઇન્ટમેન્ટ વગર વિનામુલ્યે તપાસ થઈ શકશે નહી.

આગળનો સ્વાસ્થ્ય અધિકાર દિવસ ૫ જાન્યુઆરી ૨૦૧૯



# વડોદરા મ્યુનિસિપલ કોર્પોરેશનના કર્મચારીઓ અને તેમના પરિવારજનો માટે ખુશ ખબર

વેલકેર હોસ્પિટલને વડોદરા મ્યુનિસિપલ કોર્પોરેશનના કર્મચારીઓ તેમજ તેમના પરિવારજનો માટે ઘૂંટણ પ્રત્યારોપણ તેમજ અન્ય હાડકાને લગતા રોગોની સારવાર માટે માન્યતા પ્રાપ્ત થઈ છે.





વધુ માહિતી માટે સંપર્ક - 🌁 ૦૨૬૫ ૨૩૩૭૧૭૨, ૯૪૨૯૮૨૩૫૧૯. સરનામું : વેલકેર હોસ્પિટલ, અટલાદરા વડસર રોડ, વડોદરા.

Welcare Hospital Joint Replacement OPD Details

Dr. Ronak Patel 9328921614 Godhra, Dahod 1st & 3rd Monday

Dr. Ronak Patel	9328921614	Godhra, Dahod	1st & 3rd Monday
		Balasinor, Sevaliya	1st & 3rd Friday
Dr. Varun Shah	9327435570	Khambhat	1st & 3rd Tuesday
		Nadiad, Anand	2nd &4th Tuesday
		Ratlam, Mandsaur	2nd & 4th Saturday
Dr. Kalpesh Patel	9327435618	Vapi, Valsad	2nd & 4th Friday
		Dabhoi, Bodeli, Nasvadi	2nd & 4th Saturday
Dr. Jigar Shah	9726447750	Bharuch	Every Thursday
		Surat, Bardoli, Kadodara	Every Friday
		Indore, Ujjain	1st & 3rd Saturday

Please take a prior appointment for your OPD consultation with the concerned doctor

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