



# Medical

# Echo

January | 2012

VOL. 2 | ISSUE 5

ISSN 2224-1051

**Expand  
your mind,  
Change  
your world**

## Contents

- **Day Celebration**
  - World Leprosy Day
  - World Cancer Day
- **Medical Case Echo**
- **Medical Tit-Bits**
- **Clinical Echo**
- **Corporate Echo**



# Editorial

January 2012

Dear Doctor,

New Year is the time to  
unfold new horizons & realize new dreams,  
to rediscover the strength & faith within you,  
to rejoice in simple pleasures &  
gear up for a new challenges.  
Wishing you a truly fulfilling 2012.

With the advent of New Year, a new era begins and with it comes new hopes and new possibilities. Every year teaches us some of life's most important lessons, and with that learning we put our step forward into the New Year.

**Apex Pharma** launched the **5th issue** of their periodical medical publication; in the eve of beginning of new year. Our main theme of this issue is based on '**Day Awareness**', globally a day is dedicated for the awareness of specific diseases among doctors & patients even general public. Here in this issue, we have focused on two Day Awareness campaigns of '**World Leprosy Day**' and '**World Cancer Day**' during **January & February of 2012**. We have incorporated a new section '**Medical Case Echo**', within this issue regarding the recent clinical updates from different international Medical Journal.

Different types of jaw dropping information have been shared with you through our section '**Medical Tit Bits**' to give you some medical mystery related episodes.

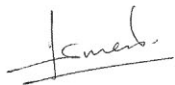
In the section of '**Clinical Echo**', we have presented intriguing the original article on the latest clinical updates.

Finally through our vibrant section of '**Corporate Echo**', we have shared our '**Continuing Medical Education (CME) program**' with you. We have arranged scientific seminars in different institutes in Bangladesh during 2011. We have got huge response from our respected prescribers and we will like to continue this knowledge based professional program to enrich our medical community.

We are eager to build bi-lateral relationship with our respected prescribers, therefore continue to give us your informative feedback is very welcome and will enrich our relationship.

Wish you all very **HAPPY NEW YEAR ...**

Sincerely yours



Dr. Mohammed Arman Ullah  
Head of Marketing  
Apex Pharma Limited



## Chief Patron

**Mr. A. M. Faruque**

The Managing Director & CEO  
Apex Pharma Ltd.

## Editorial Board

- Md. Quamrul Hassan
- Dr. Mohammed Arman Ullah
- Dr. G. M. Raihanul Islam
- Dr. S. M. Emtiazur Rahman





# World Leprosy day

29 January, 2012

For more than 50 years, on the last Sunday of January, thousands of people across the globe have stopped to remember those who suffer the horrendous effects of leprosy. Leprosy or Hansen's disease (HD) is a chronic disease caused by the bacteria *Mycobacterium leprae* and *Mycobacterium lepromatosis*. Named after physician Gerhard Armauer Hansen, leprosy is primarily a granulomatous disease of the peripheral nerves and mucosa of the upper respiratory tract; skin lesions are the primary external sign. Left untreated, leprosy can be progressive, causing permanent damage to the skin, nerves, limbs and eyes. Worldwide, two to three million people are estimated to be permanently disabled because of leprosy.

**Why:** World Leprosy Day helps to focus on the needs of the very poorest of all people - those affected by leprosy. It helps to tell the story to people who do not know that leprosy still exists and that it can now be cured. It also helps raise funds so that those with leprosy can be cured and cared for.

**History:** DNA taken from the shrouded remains of a man discovered in a tomb next to the Old City of Jerusalem shows him to be the earliest human proven to have suffered from leprosy. The remains were dated by radiocarbon methods to 1-50 C.E.

After the end of the 17th century, Norway, Iceland and England were the countries in Western Europe where leprosy was a significant problem. During the 1830s, the number of lepers in Norway, Iceland and England rose rapidly, believed to be caused by frequent visits of sailors who visited Western India, causing an increase in medical research into the condition, and the disease became a political issue. Norway appointed a medical superintendent for leprosy in 1854 and established a national register for lepers in 1856, the first national patient register in the world.

**Theme** \_\_\_\_\_

**2012: To Be Confirmed**

**2011: Together we prevent disability caused by Leprosy**



# WORLD LEPROSY DAY **2012**

JANUARY 29

**ONE BODY...**  
many members

World Leprosy Day  
We will not turn away  
in times of despair.  
We will come near,  
walk alongside.  
We will care...

**IN HIM...**  
all things  
are possible



[www.leprosy.org](http://www.leprosy.org)





# Management of Leprosy

Leprosy is a chronic infectious disease caused by *Mycobacterium leprae*, whose clinical manifestations are largely confined to the skin, peripheral nervous system, upper respiratory tract, eyes, and testes. The unique tropism of *M. leprae* for peripheral nerves (from large nerve trunks to microscopic dermal nerves) and certain immunologically mediated reactional states are the major causes of morbidity in leprosy.

## Symptom:

**Tuberculoid Leprosy:** The skin lesions of tuberculoid leprosy consist of one or a few hypopigmented macules or plaques. Often have erythematous or raised borders, and are devoid of the normal skin organs. AFB are generally absent or few in number. Tuberculoid leprosy patients may have asymmetric enlargement of one or a few peripheral nerves.

**Lepromatous Leprosy:** Lepromatous leprosy patients present with symmetrically distributed skin nodules raised plaques, or diffuses dermal infiltration, which, when on the face, results in leonine facies. Late manifestations include loss of eyebrows (initially the lateral margins only) and eyelashes, pendulous earlobes, and dry scaling skin, particularly on the feet. In lepromatous leprosy, nerve enlargement and damage tend to be symmetric.

## Diagnosis:

The diagnosis is clinical, made by finding a cardinal sign of leprosy and supported by finding acid-fast bacilli in slit skin smears or typical histology in a skin biopsy. Skin lesions should be tested for anaesthesia. The peripheral nerves should be palpated for thickening and tenderness. Neither serology nor PCR testing for *M. leprae* DNA is sensitive or specific enough for diagnosis.

## Treatment:

### WHO-RECOMMENDED MULTIDRUG THERAPY REGIMENS IN LEPROSY

Type of leprosy*	Monthly supervised drug treatment	Daily self-administered drug treatment	Duration of treatment
Paucibacillary	Rifampicin 600 mg	Dapsone 100 mg	6 months
Multibacillary	Rifampicin 600 mg Clofazimine 300 mg	Clofazimine 50 mg Dapsone 100 mg	12 months
Paucibacillary single - lesion	Ofloxacin 400 mg Rifampicin 600 mg Minocycline 100 mg		Single dose

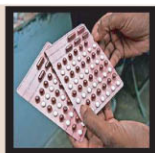
Ref; Davidson.s 21<sup>st</sup> Edition Principles & practice of Medicine



# Myths & Facts of Leprosy

**Myth:** Leprosy is caused by immoral behavior - it's a curse.

**Fact:** Leprosy is an infectious disease prevalent in areas of the world made vulnerable by high levels of poverty and malnutrition. The disease is caused by a germ, not a punishment or a curse.

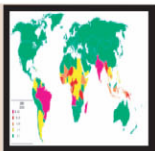


**Myth:** Leprosy is incurable.

**Fact:** With Multi-Drug Therapy, leprosy can be cured.

**Myth:** The disease spreads by touching someone with leprosy.

**Fact:** 90 to 95 percent of people are naturally immune to the disease. For those at risk, prolonged exposure to droplets from sneezing and coughing by an infected person can cause the disease to spread.



**Myth:** Nobody gets leprosy anymore.

**Fact:** Every year, hundreds of thousands of new cases of leprosy are detected.

**Myth:** Leprosy is a sexually transmitted disease.

**Fact:** No, it is transmitted primarily through respiratory secretions and at one point it was mistaken for Syphilis and that is why it was thought to be an STD.



## Nervo-B

Vitamin B<sub>1</sub> + Vitamin B<sub>6</sub> + Vitamin B<sub>12</sub> Tablet



# B<sub>1</sub>, B<sub>6</sub> & B<sub>12</sub>



## For the Management of Diabetic Neuropathy





# World Cancer Day

4 February, 2012

**Introduction:** World Cancer Day is marked on February 4 to raise awareness of cancer and to encourage its prevention, detection, and treatment. It is led by the Union for International Cancer Control, a global consortium of more than 470 cancer-fighting organizations in over 120 countries. World Cancer Day targets the public through global communications, and encourages policy makers and UICC member organizations to make cancer a political priority.

**Why:** World Cancer Day aims to help save millions of preventable deaths each year by raising awareness and education about cancer, and pressing to governments across the world to take action against the disease. World Cancer Day 2012 is particularly important as it falls almost half a year after the first High-Level UN Summit on non-communicable diseases (NCDs), and the signing of the Political Declaration supporting prevention and control of these devastating conditions, which includes cancer.

**History:** WCD is an initiative of the Union for International Cancer Control (UICC), a leading international non-governmental organization dedicated to the prevention and control of cancer worldwide. Founded in 1933 and based in Geneva, UICC's growing membership of over 460 organizations across 120 countries, features the world's major cancer societies, ministries of health, research institutes, treatment centers and patient groups. Additionally, the organization is a founding member of the NCD Alliance, a global civil society network that now represents almost 2,000 organizations in 170 countries.

## Theme

2012: "Cancer can be prevented too",

2011 : " teach children and teenagers to avoid UV exposure by being "sun smart"

2010 : " learn about vaccines against viruses that cause cancers"

2009 : "encourage an energy-balanced lifestyle based on healthy diet and physical activity "

2008 : " give children and young people a smoke-free environment "





# Management of Cancer

Oncology derives in part from the Greek onkos (mass, tumour), and describes the study of malignant disease. There are a number of common synonyms for malignant disease such as cancer, but this term technically only applies to tumours of epithelial origin. It is the second most common cause of death in the Western world, after cardiovascular disease.

## CAUSES OF CANCER:

<b>Drugs</b>	: Cytotoxics
<b>Infection</b>	: Schistosomiasis , Human papillomavirus 16 and 18
<b>Genetics</b>	: Breast cancer gene, 1/2 Hereditary non-polyposis colorectal cancer gene
<b>Lifestyle</b>	: Tobacco, Alcohol & Aflatoxin
<b>Occupational</b>	: Asbestos, Aniline dyes & Ultraviolet (UV) light

## CLINICAL ASSESSMENT

In order to plan the management of a patient with malignancy, the following information is required:

- The nature of the primary malignancy (site, type, pathology)
- The extent of the disease (stage)
- The patient's general condition and comorbidity
- The available treatment options.

## CANCERS WITH POTENTIAL FOR SCREENING

Malignancy	Method of screening	Benefits	National programmes
Breast cancer	Mammography	Reduced mortality	Yes-many countries
Cervical cancer	Cervical smear cytology	Reduced mortality (indirectly inferred)	Yes-many countries
Prostate cancer	Serum prostate-specific antigen(PSA) level	Possible reduced mortality	No
Colorectal cancer	Single flexible sigmoidoscopy Faecal occult blood test	Possible reduced mortality	No

## PRINCIPLES OF CANCER TREATMENT

The goal of cancer treatment is first to eradicate the cancer. If this primary goal cannot be accomplished, the goal of cancer treatment shifts to palliation, the amelioration of symptoms, and preservation of quality of life while striving to extend life.

## CANCER TREATMENTS ARE DIVIDED INTO FOUR MAIN TYPES:

- **Surgery**
- **Radiation therapy** (including photodynamic therapy)
- **Chemotherapy** (including hormonal therapy and molecularly targeted therapy)
- **Biologic therapy** (including immunotherapy and gene therapy).







# Myths & Facts of Cancer

**Myth:** Most cancers are hereditary.

**Fact:** It's estimated that only 5% to 10% of all cancers are truly hereditary. Tests can now determine if a person with a strong family history of breast or colon cancer carries the altered genes that put him or her at high risk for these diseases.



**Myth:** Cancer is a fatal disease with no chance of cure.

**Fact:** Cancer is a treatable disease. If diagnosed early, most types of cancer can be completely cured. Even in advanced stage cancer, much can be done to alleviate symptoms and prolong survival. Cancer should be considered a treatable disease.

**Myth:** Only people with a high risk of cancer need to get cancer screening.

**Fact:** All adults should get regular cancer screening exams because early detection provides the very best chance for successful cancer treatment.

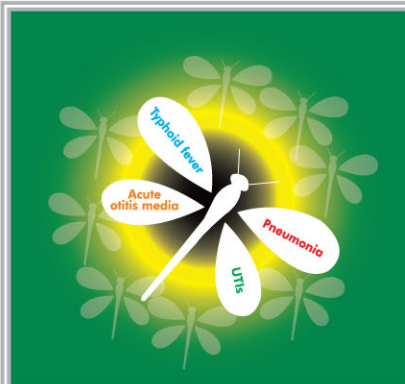


**Myth:** There is nothing I can do to prevent cancer.

**Fact:** Wrong! Up to two thirds of all cancers may be preventable if you avoid tobacco, eat a healthy diet, exercise regularly, protect yourself from the sun, limit or avoid drinking alcohol, and get recommended screenings regularly.

**Myth:** When cancer patients ask for pain medication, their disease is worsening.

**Fact:** Pain may be caused by the cancer or by cancer treatments, including radiation, surgery, or chemotherapy. Sometimes the source of pain is unrelated to the cancer. Relieving cancer pain is an essential aspect in a patient's ability to fight disease. Cancer pain does not necessarily mean the disease is progressing to its advanced stages.



## TEXTIT

Cefixime

200 mg & 400 mg Capsule, 100 mg/5 ml PFS

...a truly broad spectrum antibiotic

Apex  
pharma  
[www.apexpharmabd.com](http://www.apexpharmabd.com)





## A man with back pain

A 41 years old man presented to the emergency department with a one week history of severe and worsening lower thoracic back pain. Examination was unremarkable, with no focal neurological signs. His blood tests were normal except for an isolated raised C reactive protein of 21 mg/L (reference range 0-6). Thoracolumbar spine radiographs showed a T11 wedge fracture, which was unchanged from an earlier radiograph taken six weeks previously. This radiograph had been taken after a fall in which he also fractured his left hip, which needed internal fixation. During that admission he was treated for an *Escherichia coli* urinary tract infection. At the current presentation he was unable to mobilise and required admission for analgesia. Over the next 48 hours his pain gradually worsened and at day four he developed a fever (39°C). Blood cultures grew *E. coli*. Urgent magnetic resonance imaging of the spine was arranged (fig 1).



Fig 1 Sagittal T2 weighted magnetic resonance imaging scan of the thoracolumbar spine without contrast

### Questions

- 1 What are the radiological findings?
- 2 What is the most likely diagnosis?
- 3 What additional investigations may be helpful?
- 4 How should this condition be managed?

## Answers

### 1 What are the radiological findings?

#### Short answer

The image shows an anterior wedge fracture of T11 (fig 2). There is abnormal high signal within the T10/11 disc space and destruction of the adjacent vertebral endplates with associated angulation of the spine. Soft tissue is projecting posteriorly and causing narrowing of the spinal canal and compression of the distal cord. Oedema is seen within the T10/11 vertebral bodies.







Fig 2 Sagittal T2 weighted magnetic resonance imaging scan of the thoracolumbar spine without contrast showing abnormal high signal in the T10/11 disc space with destruction of the adjacent endplates (white arrow). The adjacent vertebrae display marrow oedema, and there is cord compression at this level

### Long answer

In the early stages of discitis the plain radiographs may be normal—changes are usually seen two to four weeks after the onset of symptoms. Plain radiography therefore has a limited role in the diagnosis and surveillance of discitis. The earliest sign is a decrease in disc space height, which is caused by intraosseous herniation of the nucleus pulposus into the vertebral body through the weakened endplate. Ill defined endplates may be seen, and there may be evidence of endplate destruction. After prolonged periods endplate sclerosis may be seen as part of the healing process. Chronic discitis can lead to bone fusion. With the advent of magnetic resonance imaging, computed tomography no longer has a major role in the imaging of discitis, but it can help identify paravertebral inflammatory masses and other causes of back pain. In addition, computed tomography is useful for obtaining image guided biopsies of the affected disc. Some patients are unable to tolerate magnetic resonance imaging or have a contraindication (such as metal implants), and in these instances computed tomography is still used. Magnetic resonance imaging is highly sensitive and specific in the diagnosis of discitis and can detect early changes long before abnormalities are seen on plain films.<sup>1</sup> In the early stages the disc height is preserved but there may be variable intensity signal in the disc space on T2 weighted images because

### Long answer

of disc oedema. This will progress to a loss of disc height and enhancement post-contrast. Erosion and destruction of the adjacent endplates may be seen. Marrow intensity is usually decreased (low T1 signal, high T2 signal) because of oedema in the surrounding vertebrae. Post-contrast images can show avid enhancement in the disc space and surrounding area, including vertebral endplate enhancement (fig 3). Epidural soft tissue extension, a paravertebral mass, spinal cord compression, and altered signal within the spinal cord may also be present. Extensive disease can cause erosion of the surrounding vertebrae and collapse. Diffusion weighted magnetic resonance imaging is a useful technique for differentiating between degenerative and infectious endplate pathology.<sup>2</sup>



Fig 3 Sagittal T1 weighted magnetic resonance imaging scan of the thoracolumbar spine taken after intravenous gadolinium contrast showing strong enhancement of the vertebral endplates, disc space, and surrounding area (white arrows)



## 2 What is the most likely diagnosis?

### Short answer

The clinical history and features on magnetic resonance imaging are consistent with a diagnosis of infective discitis. Discitis is an infection or inflammation of the intervertebral disc space or vertebral endplate. The presence of intractable back pain and fever should alert the clinician to the possibility of this condition.

### Long answer

Discitis is an infection or inflammation of the intervertebral disc space or vertebral endplate. The infection is usually the result of systemic bacteraemia from a distant septic focus—our patient's urinary tract infection is the likely source for the subsequent discitis. Discitis is a rare condition, with an incidence of about one in 100 000 in the Western world. It is more common in males than in females, with a ratio of 2-5:1. The age of onset follows a bimodal distribution, with a peak at 7 years of age and a second peak at 50 years. There is no racial predilection. In adults, discitis typically presents with a slow and gradual onset of pain and non-specific symptoms. Plain radiographs may remain normal for several weeks. The diagnosis of discitis is often delayed for these reasons. Fever, rigors, and weight loss may be present but are uncommon. In suspected cases, the threshold for early magnetic resonance imaging should be low. In children the clinical course is much more rapid. Children often present with acute onset of back pain and difficulty with mobilising. Fever is a common symptom. Discitis is generally the result of haematogenous bacterial spread. The most commonly implicated infections are pneumonias, urinary tract infections, and skin infections. Injecting drug users have a high risk of developing discitis because of direct contamination of the bloodstream. The most common organisms are *Staphylococcus aureus*, *E coli*, and *Proteus* spp. Although less common in the UK, tuberculosis must always be considered as a cause of discitis, and it can affect multiple disc levels.<sup>3</sup> In injecting drug users and immunocompromised patients *Pseudomonas* is commonly implicated. Another important cause of discitis is recent spinal surgery; the bacterial profile in these cases is different and includes *Staphylococcus epidermidis* and *Streptococcus* spp. Unexplained back pain can be difficult to manage. When evaluating back pain look for "red flag" symptoms and signs, which can indicate serious underlying pathology.<sup>4</sup> Red flags include age under 20 or over 55 years at first onset of back pain; trauma; constant or worsening pain; pain that causes the patient to wake at night; weight loss; neurological deficit; steroid treatment; HIV; history of cancer.

## 3 What additional investigations may be helpful?

### Short answer

Magnetic resonance imaging with contrast imaging is the most sensitive and specific test for discitis (fig 3). This can be supplemented with disc space biopsy (either needle or open), which can help confirm the diagnosis if the clinical or imaging findings are equivocal.

### Long answer

Even in the presence of convincing radiological evidence of infective discitis, a specific microbiological diagnosis should be sought to enable targeted long term antimicrobial treatment.<sup>5</sup> Peripheral blood cultures may help but are not always fruitful. Disc space biopsy is the most sensitive technique for obtaining an accurate microbiological diagnosis. Biopsy cultures are positive in as many as 92% of patients who have discitis, with *Staphylococcus aureus* being the most common organism.<sup>6</sup> The sensitivity and specificity of disc biopsy have been cited at 72% and 94%, respectively.<sup>7</sup> If the magnetic resonance imaging findings are typical, the blood cultures are positive, and the patient has no neurological symptoms a disc biopsy may not be needed and treatment can be based on the peripheral blood culture results.<sup>8</sup>

## 4 How should this condition be managed?

### Short answer

The mainstay of management of infective discitis is a prolonged course of targeted antimicrobial treatment, usually given intravenously. This can be supplemented by surgical debridement if necessary.

### Long answer

In the early stages of the disease immobilisation of the patient plays an important role in allowing anatomically aligned fusion of the affected vertebrae. It is common to advise bed rest for two to three weeks at least. After this, spinal bracing devices are often used to immobilise the spine for up to six months. The mainstay of treatment is antimicrobial drugs. These are usually given intravenously for a prolonged course of at least six to eight weeks, and often much longer. In the absence of positive cultures, broad spectrum antibiotics are given, but otherwise targeted treatment is the norm.

Inflammatory markers, including C reactive protein and erythrocyte sedimentation rate, should be monitored throughout. Although erythrocyte sedimentation rate was traditionally the marker of choice for monitoring discitis, several studies have suggested that serial C reactive protein measurements may be more useful. In particular, C reactive protein increases more acutely at the onset of discitis and normalises more quickly after successful treatment.<sup>9 10</sup> Nevertheless, recommendations on criteria for ending treatment still include observing a roughly 50% reduction in erythrocyte sedimentation rate and the absence of a neurological deficit.<sup>11 12</sup> No benefit has been shown for the routine use of oral antibiotics after the intravenous course. Surgery for discitis is usually reserved for patients with one or more of the following:

- Negative blood cultures (percutaneous disc biopsy generally indicated)
- Neurological impairment
- Extradural abscesses (which can cause neurological deficit)



- Progressive spinal deformity (patients should be closely monitored for this)
- Failure of medical treatment, or uncertainty in the diagnosis of infection.

The surgical procedure generally involves thorough debridement of the affected area. The surgeon has the option to provide surgical fusion at this time, which may help expedite the recovery process but can lead to further complications. Extradural abscesses may need drainage and laminectomy. Progressive spinal deformities can be managed with a spinal stabilisation procedure. Most patients are cured by surgery—only 15% are left with a residual neurological deficit. The recurrence rate is 5-10%.<sup>8</sup> One of the main tools for patient follow-up is monitoring of the erythrocyte sedimentation rate. Radiological evaluation does have a role, but imaging findings often lag a long way behind the active clinical state. The patient's blood cultures grew *E. coli*. After an eight week course of targeted intravenous antibiotics given through a peripherally inserted central catheter the symptoms gradually settled and the patient can now mobilise normally. He has a small amount of residual back pain, but no neurological deficit. Competing interests: All authors have completed the ICMJE uniform disclosure form at [www.icmje.org/coi\\_disclosure.pdf](http://www.icmje.org/coi_disclosure.pdf) (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work. Provenance and peer review: Not commissioned; externally peer reviewed. Patient consent obtained.

01. Dunbar JA, Sandoe JA, Rao AS, Crimmins DW, Baig W, Rankine JJ. The MRI appearances of early vertebral osteomyelitis and discitis. *Clin Radiol* 2010;65:974-81.
02. Eguchi Y, Ohtori S, Yamashita M, Yamauchi K, Suzuki M, Orita S, et al. Diffusion magnetic resonance imaging to differentiate degenerative from infectious endplate abnormalities in the lumbar spine. *Spine (Phila Pa 1976)* 2011;36:E198-202.
03. Abou-Raya S, Abou-Raya A. Spinal tuberculosis: overlooked? *J Intern Med* 2006;260:160-3.
04. Deyo RA, Weinstein JN. Low back pain. *N Engl J Med* 2001;344:363-70.
05. Carragee EJ. Pyogenic vertebral osteomyelitis. *J Bone Joint Surg Am* 1997;79:874-80.
06. Chew FS, Kline MJ. Diagnostic yield of CT-guided percutaneous aspiration procedures in suspected spontaneous infectious diskitis. *Radiology* 2001;218:211-4.
07. Fouquet B, Goupille P, Gobert F, Cotty P, Roulot B, Valat JP. Infectious discitis: diagnostic contribution of laboratory tests and percutaneous discostebral biopsy. *Rev Rhum Engl Ed* 1996;63:24-9.
08. Jallo GI. Diskitis follow-up. *Medscape* <http://emedicine.medscape.com/article/1263845-followup>.
09. Kock-Jensen C, Brandslund I, Sogaard I. Lumbar disc surgery and variations in C-reactive protein, erythrocyte sedimentation rate and the complement split product C3 d. *Acta Neurochir (Wien)* 1988;90:42-4.
10. Hatton M, Gupta M, Balint P, Field M. Septic discitis presenting following intravenous cannulation. *QJM* 2002;95:189-91.
11. Conaughty JM, Chen J, Martinez OV, Chiappetta G, Brookfield KF, Eismont FJ. Efficacy of linezolid versus vancomycin in the treatment of methicillin-resistant *Staphylococcus aureus* discitis: a controlled animal model. *Spine (Phila Pa 1976)* 2006;31:E830-2.
12. Walters R, Rahmat R, Fraser R, Moore R. Preventing and treating discitis: cephazolin penetration in ovine lumbar intervertebral disc. *Eur Spine J* 2006;15:1397-403.

Ref: BMJ2011;343:d4132doi:10.1136/bmj.d4132



**Baclofen**  
Baclofen 10 mg Tablet

The unique treatment option for  
**muscle spasm**

- Relieves skeletal muscle spasm
- Ensures mobility in life
- Safe in long term use

For last 31 years, **Naproxen Sodium**  
has been proved itself as the Golden  
Standard NSAID both for acute  
& chronic pain

**XPRO**

Naproxen Sodium 500 mg Tablet

A patients friendly NSAID

**Apex**  
pharma<sup>®</sup>  
[www.apexpharmabd.com](http://www.apexpharmabd.com)



### Extreme Babies - Medical Mysteries

In this section of Medical Tit-Bits we incorporate Medical Mysteries related real information. Different types of Extreme Babies are the topics of Medical Tit-Bits. These are medical mysteries from all over the world!

# 1

#### 44 pound Baby

This baby born in Iran six months ago, currently weighs an enormous 20 kilos (44 pounds)! The parents say the baby was born a normal weight close to 8 pounds when he was born, but he keeps eating every hour. The Iranian doctors do not know what this eating disorder is or where it came from.



FunOnTheNet

# 2

#### World's Smallest Baby: 21 weeks and six day

On October 24th 2006, Amillia Taylor was born at 21 weeks and six days. No baby born at less than 23 weeks gestation had ever survived, but 10 ounce Amillia was able to pull through (and even was trying to breath and cry on her own at birth). Hospitals had initially hoped to release her yesterday, but decided to keep the now healthy baby a few extra days for observation.

Her mother doesn't mind the wait, she's just proud and happy that Amillia is healthy: "Even though she's only four pounds (1.8 kilos) now, she's plump to me."



FunOnTheNet

# 3

#### Cyclops Baby

On 2006, this baby was born with a only one eye in India. Medical staff who helped deliver the child believe that the child's condition was caused by an experimental anti-cancer drug. Another cause written in the report by the hospital was that it could also be the result of a chromosomal disorder. The child was diagnosed with a rare chromosomal disorder, known as cyclopia. She was born with a single eye in the center of her forehead, no nose and her brain fused into a single hemisphere. With such severe deformities, it was a miracle that the girl survived even a few minutes after delivery. The baby died days later.



FunOnTheNet







## Tit-Bits

4

### Frog-like Baby

On 2006, this bizarre-looking baby was born in Charikot, the headquarters of Dolakha district, attracting a huge number of onlookers to witness the astonishing sight.

The neck-less baby with its head almost totally sunk into the upper part of the body and with extraordinarily large eyeballs literally popping out of the eye-sockets, was born to Nir Bahadur Karki and Suntali Karki at the Gaurishnkar Hospital in Charikot. The Karki couple is a permanent resident of Dolakha's Bhirkot VDC.

The bizarre baby, however, died after half an hour of its birth, Suntali, the mother, informed. It was taken to the hospital after its death. The news about such a baby being brought to the hospital spread like wildfire and there were hundreds gathered at the hospital to have a look. The police had to be deployed to control the crowd.



5

### Baby with Three Arms

This 2-month-old baby named Liu Junjie from Anhui Province, China, was born with a third arm on 2006. Doctors successfully removed the extremely rare and well-developed third arm, but the baby required long-term physical therapy to gain function in his remaining hand, which has no palm and flexes in either direction. "We're hoping to exchange information with doctors who've dealt with similar cases anywhere in the world," said Chen, head of the orthopedics department at Shanghai Children's Medical Center. "This is so rare that we have virtually no information to go on."



6

### Born with 17 pounds

A Siberian woman who gave birth on 2007 to her 12th child was stunned to find that little Nadia weighed in at a massive 17.1 lb (7.75kg). "We were all simply in shock," said Nadia's mother, Tatyana Barabanova, 43. "What did the father say? He couldn't say a thing - he just stood there blinking." "I ate everything, we don't have the money for special foods so I just ate potatoes, noodles and tomatoes," she told the reporter, adding that all her previous babies had weighed more than 5 kg.





In this section we include latest clinical update, which is very helpful for our respected doctors for their clinical practice.

## Eating fish can reduce the risk of diabetes

11 November 2011

A study analyses the dietary patterns of the adult Spanish population with high cardiovascular risk. The results reveal a high consumption of both red meat and fish. However, whilst eating lots of cured meats is associated with greater weight gain and a higher obesity rate, the consumption of fish is linked to lower glucose concentrations and a smaller risk of developing diabetes.

Mercedes Sotos Prieto, lead author of the study which forms part of the Predimed study (Prevention with a Mediterranean Diet) and researcher at the University of Valencia explains how **"in Mediterranean countries, consumption of foods that typically form part of the diet here has decreased in recent decades. The consumption of saturated fats mainly from red meats and industrial baking has increased and this is really worrying."**

Conducted in the Valencian Community on 945 people (340 men and 605 women) between 55 and 80 years of age and with a high cardiovascular risk, the aim of the study was to understand dietary patterns in terms of meat and fish consumption. It also sought to understand the correlation between the Mediterranean diet and its association with cardiovascular risk factors. The results were published in the *Nutrición Hospitalaria* journal and show that the studied Mediterranean population eat a large amount of red meat and fish. However, the consumption of fish is associated with a decreased prevalence of diabetes and lower glucose concentrations whereas the consumption of red meat, especially cured meats is related to increased weight gain and obesity.

The researcher points out that **"the red meat consumption of the sample population reaches an average of once a day, which is high in comparison to dietary recommendations. This could be influenced by many weight-loss diets which recommend eating grilled veal."**

Eating red meat in excess is linked to higher cardiovascular risk, higher blood pressure, diabetes and a moderate decrease in life expectancy mainly due to cancer or heart disease. In contrast, fish appears in the Mediterranean diet and has health benefits for the heart.

Despite being a cross-sectional study that does not determine a causal effect, its authors confirm that there are many similar studies where the consumption of fish, both white and, even more so oily fish, is associated with a lower risk of developing diabetes type 2. **"Various hypotheses have been put forward that attempt to explain why the consumption of fish can be related to diabetes," they explain. "The increase of omega-3 in the cells of the skeletal muscles improves insulin sensitivity."**

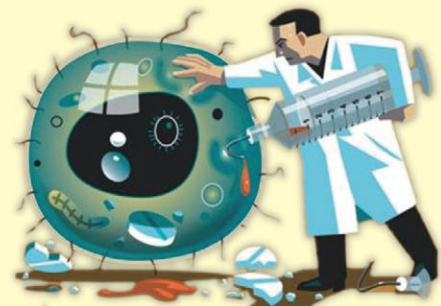
**"It is important to understand the dietary patterns of the Spanish population in order to learn whether dietary habits are changing. We should therefore strengthen dietary education,"** outlines Mercedes Sotos Prieto, who goes on to say that **"we ought to establish dietary intervention programmes so that we do not stray from the Mediterranean diet. In other words, such a diet involves decreasing the amount of red meat that we eat and maintaining equal levels of fish consumption."**

Ref: www.Science Daily

**TiL**  
Cefuroxime

125 mg, 250 mg Tab., 70 ml PFS

***An antibiotic with broad antibacterial coverage***



**Apex**  
pharma  
www.apexpharmabd.com

Apex Pharma Limited organized scientific seminar in different health institutes to enriched the "Continuing Medical Education (CME) Program" among doctors community in Bangladesh. In this section we include some recent CME program from different instiutes in Bangladesh.



Scientific Seminar on "Grand round in Ophthalmology" at Islamia Eye Hospital, Dhaka on 10 September, 2011



Scientific Seminar on "Paroxymal Supra Ventricular Tachycardia" (PSVT) at Jessore Medical College & Hospital, Jessore on 12 September, 2011



Scientific Seminar on "Importance of Dedicated Cephalosporin Facility" at Dhaka Medical College & Hospital (Burn Unit) on 17 September, 2011



Scientific Seminar on "Early Post operative complication of Open Cholecystectomy" at North Bengal Medical College & Hospital, Sirajgonj on 20 September, 2011



*Pain free smile round the clock*

60 mg, 90 mg  
& 120 mg Tablet







Scientific Seminar on "Importance of Dedicated Cephalosporin Facility" at Tairunnessa Memorial Medical College & Hospital on 26 September, 2011



Scientific Seminar on "Laparoscopic Cholecystectomy" (Personal Experience) at Delta Medical College & Hospital, Mirpur, Dhaka on 29 September, 2011



Scientific Seminar on "Pharmacological Management of Depressive Disorder" at National Institute of Mental Health, Dhaka on 01 November, 2011



Scientific Seminar on "Management of Bronchial Asthma" at Bagha Thana Health Complex, Rajshahi on 15 November, 2011



Calcium *care* in pregnancy







Scientific Seminar on "Importance of Dedicated Cephalosporin Facility" at Central Hospital Dhanmondi, Dhaka on 22 November, 2011



"Scientific Seminar on Lung Abscess" at Tangail General Hospital on 28 November, 2011



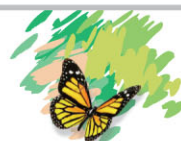
Scientific Seminar on "Importance of Dedicated Cephalosporin Facility", organized by Bangladesh Medical Association, Hobigonj on 03 December, 2011



Scientific Seminar on "Importance of Dedicated Cephalosporin Facility" at Syleht Women's Medical College Hospital, Sylhet on 04 December, 2011



Tablet  
*Freedom from anxiety & depression*





Atorvastatin 10 mg & 20 mg Tablet

*... for uncompromised cholesterol control*



- ✔ No 1 prescribing cholesterol lowering medicine in the world.
- ✔ Significantly reduces the cholesterol, LDL & triglyceride levels
- ✔ Ensures higher LDL-C goal achievement



# LosarpeX

Losartan Potassium 25 mg & 50 mg Tablet

**The brand of Losartan you can rely**



- ✔ Controls moderate to severe Blood Pressure effectively
- ✔ Provides 24-hour BP Control
- ✔ The safest among all antihypertensives



www.apexpharmabd.com