



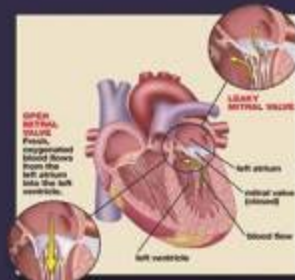
October Medical

Sept. 2011

Medical Journal of October 6 University Hospital



Why October Medical?



"Balloon dilatation of mitral valve, replacement surgery"

"LABORATORY ERRORS AND PATIENT SAFETY"



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MEDICAL JOURNAL

Issued by

Bone & Joint Center

October 6 University Hospital

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October 6th City is a fast growing new city on both industrial and residential levels. It has some universities, two medical schools and more than 10 general hospitals. Yet, there is no regular journal, magazine or newspaper to connect the medical community of doctors, nurses, paramedics and employees with the local population.

For that reason "October Medical" has been launched to fill this gap. Moreover, there is no medical publication that connects the medical community in Cairo and the whole of Egypt. It's a challenge to establish and maintain a new medical publication that caters for both medical staff and the public. In our first issue, we decided to combine a medical magazine in Arabic with a medical journal in English. Each has its own style and language, but they share the same readers, mainly doctors who study and write medicine in English but practice it in Arabic.

The editor
mhafez@msn.com

October 6 University

*More than 18,000 students, 72 nationalities and over 3,000 graduates.

* October 6th University comprises 14 colleges, namely: Medicine, Dentistry, Applied Medical Sciences, Information Systems & Computer Science, Media & Mass Communication, Languages & Translation, Social Sciences, Pharmacy, Economics & Management, Education, Hotel Management & Tourism, Physical Therapy, Engineering and Applied Arts.

Our Vision

In our dictionary the word 'Graduates' does not merely mean students who have successfully completed their academic studies, but it also means distinguished, creative youth very much able to shoulder the responsibilities they are assigned to. We take pride in using our graduates as our best 'promotional flyers'. "Be not afraid of growing slowly, be afraid only of standing still."



Mission:

To facilitate academic activities and high quality research leading to innovations and international publications

Activities:

To initiate new research ideas. Encourage new innovative techniques. Raise funding for research. Assist musculo-skeletal and orthopaedic degrees theses. Help researchers to publish their work internationally.

Members:

Trainees, qualified specialists, academics in musculo-skeletal field such as Orthopaedics, Rheumatology and Rehabilitation, Neurology, Neurosurgery, Physical Therapy, Dentistry and Veterinary Science.

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Spotlight

Dr. Mohamed Eid Fawzy

- 1963 M.B. ChB (Cairo)
- 1973 Membership of the Royal College of Physicians (London)
- 1989 Fellowship of the Royal College of Physicians (London)
- 1983 Fellow of American College of Cardiology
- 1993 Fellow of European Society of Cardiology
- 2000 Fellow of Society of Heart Valve Disease

CURRENT POSITION

*Professor of Cardiology at the University of 6th of October, Cairo.

*Honorary Professorship Honorary Associate Professor, Department of Internal Medicine, College of Medicine and Medical Sciences, King Faisal University, Dammam Honorary Professor, New York Downstate Medical School, NYU

* Authored 86 publications in different medical journals

*Delivered 176 presentations in international conferences

* Is now considered as a world-class pioneer in balloon dilation

innohep

tinzaparin sodium

**Once daily DVT & PE treatment
for all patient
without renal adjustment**

Thromboprophylaxis

4500IU syringe



For Treatment

0.5ml.....(40 - 60) KG



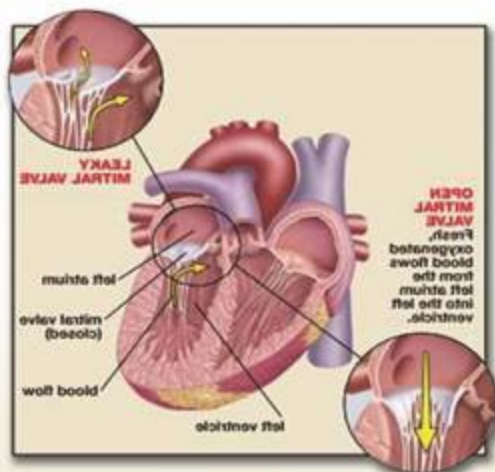
0.7ml.....(61 - 80) KG



0.9ml.....(81 - 100) KG



"Balloon dilatation of mitral valve, replacing surgery"



Rheumatic fever is an endemic disease in the Middle East, mostly affecting young children and adolescents.

Rheumatic heart valve disease is a progressive and long-standing inflammation in adulthood that leads to hardening and calcification of the mitral valve, which regulates the blood flow from left atrium into left ventricle.

Eventually narrowing of the mitral valve causes blockage of the blood flow from left atrium into left ventricle – a clinical entity is known as mitral valve stenosis.

In the past 50 years, a variety of surgical techniques have been used to relieve the mitral valve obstruction i.e. closed mitral commissurotomy. Open mitral commissurotomy is the preferred surgical procedure to replace the diseased mitral valve with a prosthetic valve by the use of open heart surgery.

Mitral balloon valvuloplasty is a procedure in which a narrowed heart valve is stretched open using a catheter balloon that does not require open heart surgery.

During this procedure, a thin tube (catheter) with a small deflated balloon at the tip is inserted through the skin in the groin area into a blood vessel and then threaded up to the opening of the narrowed mitral valve.

The balloon is inflated which stretches the valve open.

Dr.Mohamed Eid Fawzy

Hot scientific news :

Remaining Vigilant Against Bioterrorism



The 2001 anthrax attacks brought the specter of bioterrorism to the American public. A letter addressed to Senate Majority Leader Tom Daschle containing anthrax spores that caused infection killing 2 post office employees.

The 2001 anthrax attacks resulted in 22 cases of anthrax (18 confirmed and 4 suspected) causing 5 deaths and over \$1 billion in economic costs.

The attacks also resulted in increased funding for biological warfare research and public health preparedness.

In order to prioritize public health preparedness efforts, the Centers for Disease Control and Prevention (CDC) categorizes potential biological agents into 1 of 3 categories.

These categories represent highest priority agents (Category A), second highest priority agents (Category B), and emerging threats (Category C).

Anthrax is caused by *Bacillus anthracis*, a spore-forming gram-positive rod, and was traditionally an occupational disease associated with exposure to wool, animal products, and livestock.

Endemic cases in the United States are rare. Anthrax causes 3 forms of disease - cutaneous, inhalational, and gastrointestinal -- with the type of disease depending on the route of exposure.

Cutaneous anthrax is acquired by inoculation with the bacteria or spore through damaged skin.

This is the most benign form of anthrax. The mortality rate is 1% with antibiotic treatment. The form of anthrax usually associated with bioterrorism is inhalational anthrax.

Of the 22 cases of anthrax occurring with the postal attacks in 2001, a total of 11 were inhalational.

Inhalational anthrax has a high mortality rate with 95% of untreated patients and 45% of treated patients dying of the infection in the 2001 attacks.

Early treatment is associated with a better outcome.

Due to this high mortality rate, anthrax is considered a Class A agent by the CDC.

Treatment: 2 drug regimens with ciprofloxacin (preferred) or doxycycline plus an agent with central nervous system penetration such as rifampin or ampicillin for 60 days are currently recommended.

"More evidence of flowing water on Mars" reported:

Dark, finger-like features appear and extend down some Martian slopes during late spring through summer, and fade in winter.

http://www.world-science.net/othernews/110806_mars

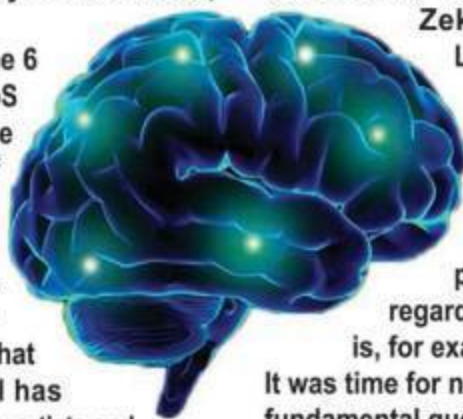


“Beauty found to activate same brain area whether it’s visual or auditory”

A region at the front of the brain “lights up” when we experience beauty in art or music, new research indicates.

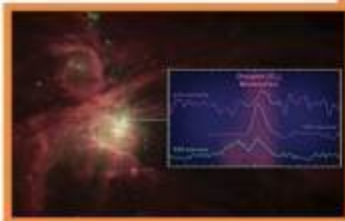
The study, published June 6 in the research journal PLoS One, suggests that the one characteristic all works of art have in common is that they lead to activity in that region of the brain.

“The question of whether there are characteristics that render objects beautiful has been debated for millennia by artists and



philosophers of art but without an adequate conclusion,” said neurobiologist Semir Zeki of University College London.

“So too has the question of whether we have an abstract sense of beauty, that is to say one which arouses in us the same powerful emotional experience regardless of whether its source is, for example, musical or visual. It was time for neurobiology to tackle these fundamental questions.”



“Oxygen molecules “confirmed” in space”

Astronomers say they have finally confirmed there are oxygen molecules in outer space, but how those got there is less certain.

http://www.world-science.net/othernews/110802_oxygen

“Study identifies relatives of microbe that became part of us”

Mitochondria -- the energy-generating compartments of our cells -- are thought to be descendants of free-living bacteria

http://www.world-science.net/othernews/110726_mitochondria



“DNA clears Ben Franklin in invasive tree case”

Blame for Chinese tallow trees overrunning swaths of the U.S. Gulf Coast is being lifted from the statesman, scientist and founding father.

http://www.world-science.net/othernews/110728_tallow



“Scientists testing theory that there are multiple universes”

Physicists are reporting possible, but only preliminary, evidence that there are more universes out there.

http://www.world-science.net/othernews/110804_multiverse



" LABORATORY ERRORS AND PATIENT SAFETY"**Prof. Dr. Dawlat El-Miligy**

Professor of Medical Biochemistry & Vice Dean Faculty of Medicine



Purpose: Laboratory data are extensively used in medical practice; consequently, laboratory errors have a tremendous impact on patient safety. Therefore, programmes designed to identify and reduce laboratory errors, as well as establishing specific strategies, are required to minimize these errors and improve patient safety. The present study identifies part of the commonly encountered laboratory errors throughout our practice in laboratory work, the hazards they present for patient health care and some measures and recommendations to minimize or eliminate these errors.

Method: Laboratory errors encountered during May 2008 were recorded and evaluated statistically (using simple per cent distribution) in the laboratory of one Egypt's private hospitals. Errors were been classified according to the laboratory phases and according to their implication for patient health.

Findings: Data obtained from testing 1,600 procedures revealed errors in 14 of them (0.87 % of the procedures tested). Most of the encountered errors lay in the pre-analytic and

post-analytic phases of the testing cycle (representing 35.7 % and 50% respectively of total errors). While the number of test errors encountered in the analytic phase represented only 14.3 % of total errors. About 85.7% of total errors had a non-significant implication for patients' health, being detected before the test reports were submitted to the patients. On the other hand, the number of test errors that have been already submitted to patients and reached the physician represented 14.3 % of total errors. Only 7.1% of the errors could have an impact on patient diagnosis.

Value of the paper: The original is the first data published from Arab countries that evaluated encountered laboratory errors and highlighted the great need for universal standardization and bench marking measures to control laboratory work.

Practical implication: The findings of this study were concomitant with those published from the USA and other countries. This proves that laboratory problems are universal and need general standardization and bench marking measures.

Long-Term Results from up to 19 Years of Mitral Balloon Valvuloplasty

Clinical and echocardiographic data of 547 consecutive patients (mean age, 31.5 years) undergoing mitral balloon valvuloplasty with follow-up of 1.5 to 19 years, were analysed. Immediately after valvuloplasty, mitral valve area increased significantly from 0.92 ± 0.17 to 1.95 ± 0.29 cm². Restenosis occurred in 169 (31%) patients; it was less common (20%) in those with a mitral echocardiographic score 8. Actuarial freedom from restenosis at 10, 15, and 19 years was $78\% \pm 2\%$, $52\% \pm 3\%$, and $26\% \pm 4\%$, respectively, and significantly higher in patients with echocardiographic scores 8: $88\% \pm 2\%$, $67\% \pm 4\%$, and $40\% \pm 6\%$, respectively. Event-free survival at 10, 15, and 19 years was $88\% \pm 2\%$, $60\% \pm 4\%$, and $28\% \pm 7\%$, respectively, and significantly higher in patients with echocardiographic scores 8: $92\% \pm 1\%$, $70\% \pm 4\%$, and $42\% \pm 7\%$, respectively.

Multivariate analysis identified echocardiographic score 8 and post-procedure valve area 1.8 as predictors of restenosis, and echocardiographic score >8 and preexisting atrial fibrillation as predictors of combined events. Valvuloplasty provides excellent results in selected patients with mitral stenosis. The long-term outcome can be predicted from the baseline characteristics of the mitral valve.

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Mohamed Eid Fawzy, FRCP October 6 University, Cairo, Egypt

ABSTRACTS (by our staff)

Effects of Losartan, HO-1 Inducers or HO-1 Inhibitors on Erectile Signaling in Diabetic Rats

Mohamed Talaat Abdel Aziz, Mohamed Farid El Asmer, Taymour Mostafa, Hazem Atta, Soheir Mahfouz, Hanan Fouad, Laila Rashed, Dina Sabry, MD, Amira Hassouna, Ahmed Talaat Abdel Aziz, Amira Senbel, and Ahmed Demery, J Sex Med 2009; 6:3254-3264.

Introduction:

Activation of the renin-angiotensin system, which is common in diabetes mellitus might affect heme oxygenase (HO-1) gene expression.

Aim:

Assessment of the effects of administration of angiotensin II (Ang II) receptor antagonist (losartan) with HO-1 inducer or inhibitor on erectile signaling in diabetic rats.

Materials and Methods:

Seventy male rats were divided equally into seven groups; healthy controls, streptozotocin induced diabetic rats, rats on citrate buffer, diabetic rats on losartan, diabetic rats on HO-1 inducer (cobalt protoporphyrin [CoPP]), diabetic rats on losartan and CoPP, and diabetic rats on losartan and HO-1 inhibitor (stannous mesoporphyrin [SnMP]).

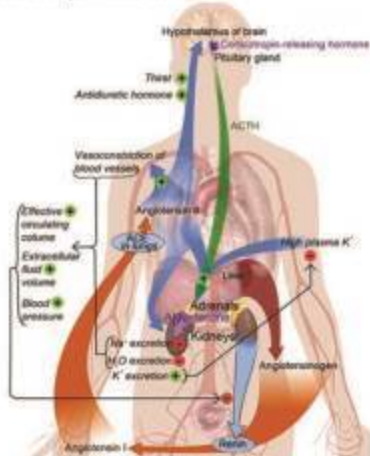
Main Outcome Measure:

HO enzyme activity, HO-1 gene expression, cyclic guanosine monophosphate (cGMP) assay, intracavernosal pressure (ICP), and cavernous tissue sinusoids surface area.

Results:

HO-1 gene expression, HO enzymatic activity and cGMP were significantly decreased in the cavernous tissue of diabetic rats. These parameters were significantly elevated with the use of CoPP that restored the normal control levels of HO enzyme activity. Administration of losartan exhibited a significant enhancing effect on these parameters compared with the diabetic group, but not restored to the control levels, whereas administration of CoPP combined with losartan led to the restoration of their normal levels. ICP demonstrated significant decline in diabetic rats. The use of CoPP and/or losartan led to its significant improvement compared with diabetic rats. Administration of either losartan and/or CoPP led to a significant increase in the cavernous sinusoids surface area of diabetic rats.

Administration of losartan with SnMP significantly decreased the enhancing effect of losartan on the studied parameters.



Conclusion:

The decline in erectile function in diabetes mellitus could be attributed to the down regulation of HO-1 gene expression. HO-1 induction added to Ang II receptor antagonist could improve erectile function.

Dorofen

α -D-Glucosamine Sulphate 500 mg
Standardized Ginkgo Biloba Leaf Extract 50 mg

1st Choice

for the Treatment of Osteoarthritis

LP LIPTIS

Antidote is derived from a Greek word that means against. In medical terms, it is a drug that can act against another drug or poison. In all cases of poisoning by substances taken by way of the stomach there are five indications for immediate treatment.

- 1- Act quickly.
- 2- Empty the stomach by lavage or emetic – the first even if the poison itself has caused vomiting, but not the second when corrosives have been taken.
- 3- Neutralise by the appropriate antidote whatever remains in the stomach, despite emetics or lavage, bearing in mind that some poisons are secreted again in the stomach after having been absorbed.
- 4- Aid elimination by the bowels and kidneys of what has been absorbed.
- 5- Treat the condition resulting from the action of the poison. Giving the whites of eggs is useful in most cases of poisoning, and tannin is antidotal to all alkaloids.

Drug or (poison)	Antidote
Acetaminophen	NAC(N-acetylcysteine)
Anticholinergics	Physostigmine
Anticoagulants (warfarin/coumadin,heparin)	Vitamin K1, protamine.
Benzodiazepines	Supportive Care, Flumazenil*
Botulism	Botulinum Antitoxin
Beta Blockers	Glucagon
Calcium Channel Blockers	Calcium,? Glucagon?
Cholinergics	Atropine, Pralodixime in Organophosphate Overdose
Carbon Monoxide	Oxygen, Hyperbaric Oxygen
Cyanide	Amyl Nitrate, Sodium Nitrate, Sodium Thiosulfate, Hydroxycobalamin (Available in Europe).
Digoxin	Digoxin Fab Antibodies
Iron	Deferoxamine
Isoniazid	Pyridoxine
Lead	BAL, EDTA, DMSA
Methemoglobinemia	Methelene Blue
Opioids	Naloxone
Toxic Alcohols	Ethanol Drip, Dialysis.Experimental trials underway on Enzyme Inhibitors.
Tricyclic Antidepressants	Sodium Bicarbonate

Activities By October 6 University staff

Sample of international publications:

Mohamed Eid Fawzy

Mitral balloon valvuloplasty. Journal of the Saudi Heart Association.

July 2010 (Vol. 22, Issue 3, Pages 125-132)

Dawlat El-Miligy

Laboratory errors and patient safety in its current form for publication in the International Journal of Health Care Quality Assurance

Mahmoud Hafez

Book Chapters:

Hafez MA. Custom-Made Cutting Guides for Knee Arthroplasty. In Surgery of the Knee (5th Ed.), Install JN, Scott N (Eds).

Philadelphia, Churchill Livingstone. Due 2011.

Hafez MA. Patient specific instrumentation: The past, the present and the future. In Improving Accuracy in knee Arthroplasty. Edited by Thienpont, E., Jaypee Brothers Medical Publishers (P) Ltd., Due 2011

Original:

Hafez MA, Jansen A, Portheine F, Jaramaz B. A Novel Technique of Patient Specific Templating for Total Knee Arthroplasty: Laboratory Validation and Clinical Application. Hap Paul Award. To be published in Journal of Arthroplasty

Hafez MA. CAOS: The ideal solution for neglected deformities of hip and knee arthritis. Special issue on

"Smart Orthopaedic Surgery".

The Journal of Biomedical Engineering. 2011.

News for our staff

* Prof Mohamed Eid FAWZY *

Professor of Cardiology was invited to lecture in the plenary scientific session The Hyatt Regency, Vancouver, BC, Canada entitled:

"19 Years Follow-up Results of Mitral Balloon Valvuloplasty" on 26-7-2011.

* Prof Mohamed Kadry *

Dean Faculty of Medicine, was elected as the Geographic representative of Africa and the Middle East, for the Executive Committee of the International Society of Plastic, Reconstructive & Aesthetic Surgery (IPRAS).

The duration of this mandate is four years.

* Prof Mahmoud Hafez *

Professor of Orthopaedics was invited as guest speaker and chairman of a workshop on the emerging technique of custom-made surgical guides for knee replacement.

At the 11th Annual Meeting of the International Society for Computer-Assisted Orthopaedic Surgery.

June, 2011. London, UK.

Then invited by the World Orthopaedic Organisation (SICOT) as an examiner for the SICOT diploma, chairman of scientific sessions and instructor in the ICL on navigation for knee replacement at The XXV Triennial World Congress of SICOT.

September, 2011, Prague, Czech Republic

Events in October 6 University	Date
Orthopaedic skills course	September 2011
5 th international arthroplasty , Conference Sharm El Sheikh	January 2012
Professional diploma in orthopaedics (1 year of clinical & operative training)	2011 -2012