



EMIRATES CARDIAC SOCIETY

November 2010

Vol IV



World Heart Federation's World Congress of Cardiology in DUBAI

Dubai has won the bid to host the World Heart Federation's World Congress of Cardiology that will take place in 2012. The prestigious congress takes place once in two years and is a platform where the global healthcare community and cardiologists from all over the world discuss the latest advances in the prevention and control of cardiovascular disease. The World Heart Federation is a nongovernmental organization committed to helping people achieve a longer and better life through prevention and control of heart disease and stroke, with a focus on low and middle income countries. It is a membership organization comprised of medical societies and heart foundations from over 100 countries.

Raising awareness about cardiovascular disease, risk behavior and prevention strategy was the theme of the World Heart Day 2010 in Dubai. The Dubai Heart Center in Dubai Hospital held a public awareness campaign in one of the most frequented shopping malls in Dubai. Shoppers were screened with BMI, waist circumference, blood sugar and spot lipid tests and smoking status assessed. The results were then used to educate the person about therapeutic lifestyle changes and pamphlets on the same given. Newly diagnosed blood sugar, lipid and blood pressure abnormalities were offered referral for evaluation. The campaign was a runaway success and close to a thousand people were screened in 3 days.



State of the Heart

Cardiovascular Disease Report

We call on healthcare professionals to:

- Raise awareness of CVD risk factors amongst their patients, and utilize opportunities to educate patients on CVD prevention
- Ensure adequate data collection to identify barriers to implementing evidence-based clinical practice
- Participate in training programmes related to NCDs to ensure a specialised healthcare workforce
- Work with a wide range of colleagues to make certain the engagement of multidisciplinary teams in the prevention and management of CVD
- Adhere to global, national and local guidelines on the management of people with CVD, to ensure swift diagnosis and provision of the right treatment
- Engage with commissioners and funders to encourage the ring-fencing of budget towards the prevention and management of NCDs

Since charity begins at home and workplace health is a challenge that needs attention, Dubai Heart Center conducted a similar campaign for health workers and patient visitors in Dubai Hospital.

Dubai
Heart
Center
DUBAI HOSPITAL

حكومة دبي
GOVERNMENT OF DUBAI

هيئة الصحة بدبي
DUBAI HEALTH AUTHORITY

Evaluation of Drug Therapy in Malaysian Patients with Unstable Angina

Feras Jassim Jirjees¹, Yahyah Hassan², Maha M. Saber-Ayad^{1,3}

¹College of Pharmacy, University of Sharjah, Sharjah, United Arab Emirates,
²School of Pharmaceutical Sciences, University Sains Malaysia, Penang, Malaysia.
³Pharmacology Department, Faculty of Medicine, Cairo University, Cairo, Egypt

Abstract

Coronary artery disease is an important cause of morbidity and mortality all over the world. In Malaysia, it accounts for 40% of the cardiovascular burden. The number of acute coronary syndrome admissions was therefore 47.1 per 100,000 in 2006.

Following acute coronary management guideline is the cornerstone in treating unstable angina patients. However, the strict following of this guideline may not be the first choice in some unstable angina cases. Therefore, this study aims to evaluate the therapeutic management of unstable angina patients and assess the outcome of implementing the American College of Cardiology/American Heart Association (ACC/AHA) guideline on unstable angina medication management in terms of the length of hospital stay and the incidence of complications. Methods: A cohort of hundred unstable angina patients admitted to Penang General Hospital, Malaysia

was recruited in the study. Beside full medical history, clinical assessment and investigations of patients, data was collected regarding their in-hospital medication management. Assessment of implementing ACC/AHA guideline was carried out.

Result: the majority of patients (65%) were treated according to ACC/AHA guideline Figure (2). Most unstable angina patients (85%) have three or more Thrombolysis In Myocardial Infarction (TIMI) risk scores. The mean age of the patients is 62.1 ± 11.3 years. The mean length of hospital stay is 6.86 ± 3.99 days. Complications-figure (3) -occurred more frequently in the group followed guideline than those who did not strictly follow it. Conclusion: There was statistically significant difference between the group followed the guideline and the group who did not strictly follow it in terms of length of in-hospital stay and complication incidence. This may be explained by differences in prevalence of some comorbidities among different populations all over the world.

Figure (2) Implementation of the AHA/ACC guideline for UA patients in relation to TIMI

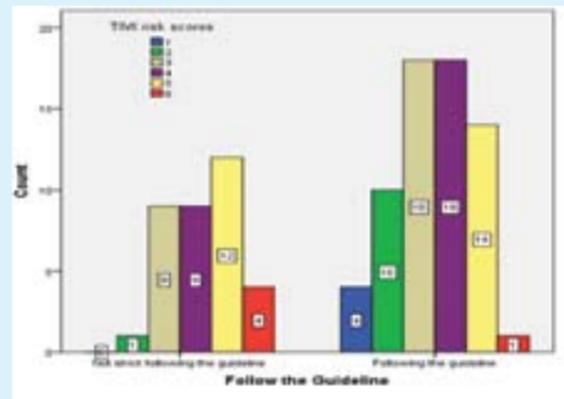
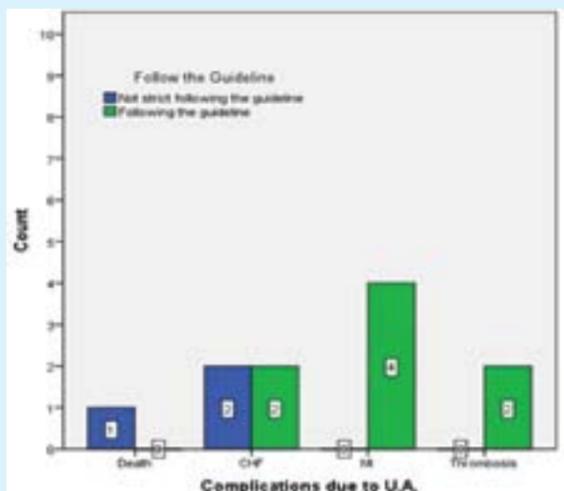


Figure (3): Short-term Complications during In-hospital Stay risk scores



Pasion for your Heart

Poem

Your heart stands with glory and pride
 Sitting on your very left side
 Your heart beats continuously
 Pumping blood around the body fiercely
 Atriums and ventricles push
 Running blood in a rush
 To Supply cells with what they need
 To help you respire, move and feed
 Greasy food blocks the arteries
 Disabling the heart and turning it filthy
 Letting smoke into your vein
 All leading to eternal pain
 Valves avoid the flow of blood backwards
 Escaping suicide road
 Always take care of your heart
 Thus you do not be apart

It lives its life for you
 So help him with whatever you can do

Anal Badri



Your Precious Heart

Its inside your human chest
 Its apart of you, it does not rest
 Your heart beats easily
 If its stops you die instantly
 Your ribs protect your lung and heart
 When you exercise it pumps as fast as a go-cart
 Smoking is dreadful for you
 Never do it even if someone tells you to
 It can damage your heart and vein
 Leading to torture , harm and pain
 Its not the only thing that's bad
 There's also something else you've never had
 Like alcohol it'll drive you crazy
 Soon it will also make you lazy
 What's horrible for you is greasy food
 Eat something nutritious that's full of good
 Another very essential part
 The arteries take blood to the body from the heart
 Your heart pumps blood around your body
 So you don't be buried where it is muddy
 It gives you what to choose
 To take it right and not to loose
 How your heart is lovely such a desire
 Keep taking care of it, it will take you higher

Shahad Badri and Yasmeen Awadhi

Saving Patient's Life"

Dr. Bassil Khalil Ali Al-Zamkan and Dr. Tarek Abdel Aziz



37-year-old Serbian gentleman with no previous medical illness presented to Emergency Department, Dubai Hospital, with complaints of agonizing chest pain, breathing difficulty and manifestations of low cardiac output. He had had a 7 hour long flight.

CT angio of chest was urgently requested and it was a big surprise to see an acute dissecting ascending aortic aneurysm with pericardial effusion. The diameter of the aorta was 6 cm (normal 3.5 cm to 4 cm at maximum).

Urgent echocardiography revealed no aortic regurgitation, dilated ascending aorta and pericardial effusion with tamponade

Decision was made for immediate surgical intervention. The sternum was opened and pericardium was opened, and it was evacuated from blood and blood clots (more than 1 liter) and the tamponade was relieved.

Then, the patient was connected to the heart lung machine. The diseased aneurysmal aorta was resected and replaced with Goretex prosthetic tube graft. Finally, the patient was weaned from the cardiopulmonary bypass. The sternum and wound were closed. The patient was shifted to SICU in stable condition for observation and weaning from mechanical ventilation.

A few days later, the patient was shifted to the cardiothoracic surgery ward to complete his postoperative recovery. Soon after, he was discharged home.

This type of surgery (replacement of acute dissecting ascending aortic aneurysm with tube graft) is considered one of the most risky procedures in cardiac surgery considering the patient's condition (acute dissection, hemodynamic instability, and pericardial tamponade). The likelihood of sudden rupture of the aneurysm carries a mortality of almost 100%.

The success of these procedures, after God's will, is due to several factors including precise and rapid diagnosis, quick decision for immediate surgical intervention after the brisk preparation, the presence of the most recent and high tech advanced medical equipments and finally the presence of highly qualified well trained competent surgical team capable of performing and dealing with such emergency situations round the clock.



Dr. Sadeq Ali

Dubai Heart Center performance measures for adults with acute myocardial infarction

Acute myocardial infarction is considered to be a disease with high mortality and morbidity. It is known that applying the guidelines in the management of this syndrome can reduce the mortality rate among the patient suffering from this lethal syndrome. The ACC/AHA has developed clinical performance measures concerning the diagnosis, treatment, and outcomes of both STEMI and NSTEMI. The purpose of this effort is to developed measures that can be used to improve the quality of care for patients with an acute myocardial infarction. These measures have recently been updated and published in 2008. Table1 is showing data from a 3 years registry of ACS in Dubai hospital.

Table 1 Dubai hospital clinical performance measures.

Measure Name	Type	DH (%)
1. Aspirin at arrival	Treatment	99.1
2. Aspirin prescribed at discharge	Treatment	97.6
3. Beta-blocker prescribed at discharge	Treatment	94.2
4. Statin prescribed at discharge	Treatment	96.9
5. Evaluation of LVSF	Diagnostics	78.8
6. ACEI or ARB for LVSD	Treatment ≤ 50 %	
7. Time to fibrinolytic therapy (min)	Treatment	29 (20-44.5) *
8. Time to primary PCI (min)	Treatment	72 (53.5-166.5) **
9. Reperfusion therapy	Treatment	87
10. Time from ED arrival at STEMI referral facility to ED discharge from STEMI referral facility in patients transferred for primary PCI	Treatment	Not applicable
11. Time from ED arrival at STEMI referral facility to primary PCI at STEMI receiving facility among transferred patients	Treatment	Not applicable
12. Adult smoking cessation advice/counseling	Patient Education	Not assessed
13. Cardiac rehabilitation patient referral from an inpatient setting	Patient Education Treatment	Not assessed
T-1. LDL cholesterol assessment	Diagnostics	88.3
T-2. Excessive initial heparin dose	Treatment	Not assessed
T-3. Excessive initial enoxaparin dose	Treatment	Not assessed
T-4. Excessive initial abciximab dose	Treatment	Not assessed
T-5. Excessive initial eptifibatide dose	Treatment	Not assessed
T-6. Excessive initial tirofiban dose	Treatment	Not assessed
T-7. Anticoagulant dosing protocol (structural measure)	Treatment	Not assessed
T-8. Anticoagulant error tracking system (structural measure)	Treatment	Not assessed
T-9. Clopidogrel prescribed at discharge for medically treated AMI patients	Treatment	86.9***

* Ideal < 30 min. ** Ideal < 90 min. *** For all MI patients

We in Dubai hospital have met many of the performance indicators as shown above. However there are many newer challenges to attain such as to monitor patients education and rehabilitation as well as anti bleeding measures that we intend to pursue these as well.

Follow up of Acute Coronary Syndrome (ACS) patients at Dubai Hospital

Dr. Sadeq Ali

Acute coronary syndrome (ACS) has not only increased mortality and morbidity during the hospitalization but also at the later stage. We do not know how our patients with ACS fare after discharge in the UAE. Follow up is thought to be difficult as a large portion of the population is expatriate and therefore presumably mobile. Even large published registries from Gulf, India and China had no 6 months and 1 year follow up.

We in Dubai Heart Center; registered 109 consecutive patients of age 18 and above admitted with symptoms of chest pain and diagnosed as ACS. We recorded their characteristics, treatment, in hospital outcome, six months and one year follow up. At least 3 telephone numbers were collected from each patient. At the end of one year; 94 (88.6%) patients among the ones who were discharge alive, completed one year follow up and major adverse cardiovascular events (MACE) were recorded. The mean in-hospital mortality was about 2.75% and total mortality at one year 4.63%. Majority of the patients were re-vascularized during the hospital stay and around 82% of the patients had some form of revascularization at one year follow-up. At one year; 6.6% had re-infarction and 3.71% developed congestive heart failure. Rehospitalization occurred in 22.64% of the survivors at one year follow-up (Table 1).

Table 1 Cardiovascular event rate during in-hospital and one year follow-up

Events	In-hospital (%)	At six months (%)	At one year (%)	Total (%)
Re-infarction	1(0.92)	3 (2.83)	3 (2.83)	7 (6.6)
Revascularization				
PCI	67 (61.47)	7 (6.60)	3 (2.83)	77 (70.9)
CABG	7 (6.42)	5 (4.72)	0	12 (11.14)
Stroke/TIA	2 (1.83)	0	0	2 (1.83)
CHF	2 (1.83)	1 (0.94)	1 (0.94)	4 (3.71)
Re-hospitalization	-	19 (17.92)	5 (4.72)	24 (22.64)
Mortality	3 (2.75)	1 (0.94)	1 (0.94)	5 (4.63)

PCI = Percutaneous Coronary Intervention. CABG = Coronary Artery Bypass Grafting. TIA = Transient Ischemic Attack. CHF= Congestive Heart Failure

We feel that follow up is feasible in our community and better follow up can be expected if we get contact number from home country.

Sharing Matters of the Heart

I would like to thank all of my colleagues in UAE who helped me to produce this newsletter of Emirates Cardiac Society. Without your contribution, I could not achieve this goal and I hope that we continue to work together to exchange our experience in order to try to reduce the burden on cardiovascular disease in UAE.

Editor & Design:

Dr. Hind Hassan Osman

Dr Suresh Nair &

Dr. Nooshin Bazargani

Dubai Heart Center

Dubai Health Authority

Contribution:

All Cardiovascular Colleagues in UAE

e-mail: nmbazargani@dohms.gov.ae

The newsletter is available on line at

<http://www.emiratescardiac.com/>

Sponsored by Merck Serono

Printed by: Signatures Advertising



Merck Serono



where ever you go,
go with all your

Concor[®]
Bisoprolol



A selective β1 Blocker..

•Proven Long-term efficacy in Arterial Hypertension¹

•Concor showed no influence on blood glucose level in type II diabetic hypertensives³

References:

1. Giesecke HG et al. J Cardiovasc Pharmacol 1990; 16 (Suppl 5): 175

2. Neutel JM et al. Am J Med 1993; 94:181-187

3. Janka HU et al. J Cardiovasc Pharmacol 1986; 8 (Suppl 11): S96-9

* For further information, kindly contact MERCK SERONO regional Office*

Dubai Academic City, Building 3, Ground floor
P.O.BOX 22730 Dubai, UAE

Tel: +971 4 375 2700

Fax: +971 4 429 1390

Jan 2010