



### King Abdulaziz Medical City







January 2010

Issue 6

#### Saudi Critical Care Society (SCCS) Conference in Jeddah



You are invited to the Saudi Critical Care Society International Conference which will be held in Jeddah, Saudi Arabia. SCCS 2010 will be the largest critical care conference ever held in the Middle East. The conference will run from April 27th to the 29th & will feature leading Intensivists from the Kingdom & around the world. Pre-conference courses will be held on April 25th & 26th. Please visit the SCCS website for more information at: http://www.sccs-sa.org/

#### **PRECISE Study Phase III**

This is a multi-center randomized controlled trial conducted in 25 Canadian Academic Centers, as well as Kingdom of Saudi Arabia. The Principle Investigator is Dr. Lauralyn McIntyre. The Primary Investigators at KAMC are: Dr. Yaseen Arabi and Dr. Saad Al-Qahtani. The Co-Investigators: Dr. Shmylan Al-Harbi, Dr. Sajid Hussain, Dr. Seema Noushad and Fong. KAMC will be coordinating this study in Saudi Arabia. The following centers agreed to be part of the study:

- 1. King Abdulaziz Medical City, Riyadh.
- 2. Riyadh Armed Forces Hospital, Riyadh.
- 3. King Faisal Specialist & Research Center, Riyadh.
- King Faisal Specialist Hospital & Research Center-General Organization Jeddah.
- 5. King Khalid National Guard Hospital, Jeddah.
- 6. King Abdulaziz University Hospital, Jeddah.

There will be a web-bas lecture among Ottawa Hospital-General Campus, KAMC and the other six centers.

#### A study from KAMC-ICU was referenced in Medical Letter

A study conducted at the KAMC-ICU (Dr. Arabi et al.) "Intensive versus conventional insulin therapy: a randomized controlled trial in medical and surgical ill patients". (Crit Care Med 2008; 36:3190), was referenced in the Medical Letter On Drugs and Therapeutics January 25, 2010, volume 52 (Issue 1330).

#### Issue Highlights:

- Saudi Critical Care Society (SCCS) Conference in Jeddah. More details ....
- PRECISE Study Phase III ....
- A study from KAMC-ICU was referenced in Medical Letter....
- PROTECT study, latest updates....
- The III Mechanical Ventilation Study, read more....
- Permissive Underfeeding Trial .. Initiated by Adult ICU
   KAMC....
- The Saudi Critical Care Society Trial Group Webbased Conference...
- ICU Research Meeting ...
- Pro/Con Debates ....
- The Oscillation for ARDS Treated Early (OSCILLATE) Trial Study.
- Publications...
- Accepted Manuscripts...
- ATS 2010. Read more ...
- KAMC has enrolled 18 patients in DECRA Trial...
- An Educational Research visit from Australia ....
- Important Upcoming Critical Care Conferences...
- Question of this issue: A patient in the underfeeding arm will .... Please read more on page 6.

ICU Research Newsletter KAMC

#### **PROTECT Study**



King Abdul-Aziz Medical City (KAMC)-ICU continue to recruit patients into PROTECT study, which compares deltaparin (LMWH) vs. unfractionated heparin for DVT prophylaxis in critically ill patients. So far, we have recruited 42 patients. The Principle Investigator is Dr. Deborah Cook.

The data monitoring board met in January 5th, 2010 and did the 2nd and final interim analysis. It was concluded that the trial is being conducted to a high methodologic standard and that it will continue to its planned conclusion (approximately 3650).

#### The III Mechanical Ventilation Study

This is a new observational study that will evaluate the characteristics and outcomes of critically ill patients requiring mechanical ventilation for > 12 hrs.

The study will begin on April 1st 2010. Patients will be followed from initiation of mechanical ventilation until either the end of mechanical ventilation, or death or day 28.

The Principle Investigator is Dr. Andres Esteban. KAMC will be the coordinating this study in Saudi Arabia.

All centers are invited to participate in this study.



### Permissive Underfeeding Trial Initiated by Adult ICU @ KAMC

The Intensive Care Department at KAMC launched a trial called "The Impact of Permissive Underfeeding versus Target Enteral Feeding on Morbidity and Mortality in Adult Critically III Patients". The proposal for this trial was approval by the KAIMRC and the KAMC-IRB.

This is the first multicenter and multinational trial initiated by the adult ICU at KAMC. So far, 10 centers showed their interest to participate in the study.

KAMC has started the trial in November 2009 and has already recruited 25 patients so far. The database has also been build and reports will be generated.

In addition, Trial agreements have been signed by the Chairman, Research center, KAMC and are ready to be sent to other participating centers.

## The Saudi Critical Care Society Trial Group Web-based Conference

The Saudi Critical Care Society Trial Group (SCCSTG) held the first web-based conference among King Abdulaziz Medical City, Riyadh Armed Forces Hospital and King Saud Medical City on January 06, 2010 to exchange ideas and update the "Impact Permissive of Permissive Underfeeding Versus Target Enteral Feeding on Morbidity and Mortality in Adult Critically III Patients" study.

During the meeting, Dr. Arabi presented "How to write a manuscript". Then, ICU protocol of the study (The Impact Permissive of Permissive Underfeeding Versus Target Enteral Feeding on

Morbidity and Mortality in Adult Critically III Patients) was presented by Dr. Al-Dorzi. Then Dr. Al-Jabbary presented the scientific program of the first SCCS conference that will be held in Jeddah from April 25th-29th, 2010 at Jeddah Hilton Hotel.

You can register online at: www.sccs-sa.org

The Research team at KAMC are looking to have many meeting through the web-conference with other centers.

#### **ICU Research Meeting**

The intensive care department continues to hold its weekly critical care research meetings on Wednesday from 2:00 to 4:00 PM. These meetings represent a venue to discuss progress of ongoing trials and studies, present new research proposals, review manuscripts under preparation and reply to editor. In addition, tutorials on clinical research, with focus on research methodology, will be presented to improve our knowledge and enhance our ability to conduct various types of clinical research.

Two of our meetings were shared with other institutions in Saudi Arabia using live teleconference technology. This has been done in collaboration with the Saudi Critical Care Society (SCCS)-Trial Group. We are trying to expand this experience across Saudi Arabia.

#### **Pro/Con Debates**

We are preparing to have a joint meeting between our department and University of Toronto via Videoconference. During the meeting, one expert or a team of experts will review literature on a debatable issue in critical care, will present both the pro and con aspects and will decide for the readers what they would actually do in clinical practice. The first meeting is expected to happen in March and then every 3 months. Presenters will alternate between Canada and Saudi Arabia.

#### The Oscillation for ARDS Treated Early ( OSCIL-LATE) Trial Study



The primary objective for the full OSCILLATE trial is to determine the effects of high frequency oscillator versus conventional ventilation on mortality in adults with severe ARDS. The OSCILLATE pilot trial was to assess the feasibility of the ventilation strategies and study procedures. Eleven ICUs participated in the pilot trial (10 in Canada and 1 in Saudi Arabia (King Fahad National Guard). Recruitment finished July 2008 for the pilot trial. King Fahad National Guard ICU recruited 15 patients out of 94. The Principle Investigators are Dr. Niall Ferguson and Dr. Maureen Meade.

The full multinational trial has started recruitment in July 2009 and will continue for 5 years.

An OSCILLATE start up meeting was done in Vienna on October 15, 2009 for all the centers involved in the study. Please contact Dr. Hytham Tlayjeh or Dr. Yaseen Arabi if you have patient with ARDS admitted to KAMC-ICU.

#### **Publications**

- "Rapid response systems in acute hospital Care." Saad Al-Qahtani and Hasan M. Al-Dorzi. Published in the Annals of Thoracic Medicine Vol 5, Issue 1, January-March 2010
- 2) "Relationship between intracranial pressure monitoring and outcome in severe traumatic brain injury patients." Dr. Samir Haddad MD, (Oral presentation at The society of Criti-Cal Care Medicine's (SCCM) 39th Critical Care Congress).

- 3) "Outcomes of patients ventilated with synchro nized intermittent mandatory ventilation with pressure support (SIMV-PS): A comparative propensity score study". Ortiz G, Frutos-Vivar F, Fer guson ND, Esteban A, Raymondos K, Apezteguía C, Hurtado J, González M, Tomicic V, Elizalde J, Ab roug F, Arabi Y, Pelosi P, Anzueto A; for the Ventila group. Chest. 2009 Dec 18.
- 4) "Sedation in ICU: are we achieving goals?" Haddad S, Arabi Y, Al-Dawood A, Al-Qahtani S, Pillay M, Naidu B, Issa A. Middle East J Anesthesiol. 2009 Oct;20(3):389-96.
- 5) "Initiation of inappropriate antimicrobial therapy results in a fivefold reduction of survival in hu man septic". Kumar A, Ellis P, Arabi Y, Roberts D, Light B, Parrillo JE, Dodek P, Wood G, Kumar A, Simon D, Peters C, Ahsan M, Chateau D; Coopera tive Antimicrobial Therapy of Septic Shock Database Research Group. Chest. 2009 Nov;136(5):1237-48. Epub 2009 Aug 20.
- 6) "Saudi guidelines for testing and treatment of Latent tuberculosis infection". Hamdan H. Al-Jahdali, Salim Baharoon, Abdullah A. Abba, Ziad A. Memish, Abdulrahman A. Alrajhi, Ali AlBarrak, Qais A. Haddad, Mohammad AlHajjaj, Madhukar Pai, Dick Menzies. Ann Saudi Med 30(1) Jan-Feb 2010.

#### **Accepted Manuscripts**

- "Glycemic Fluctuation Predicts Mortality in Critically III Patients". Al-Dorzi HM, Tamim HM, Arabi YA. Accepted for publication in Anaesthesia and Intensive Care.
- "Nursing Workload and Perception about Intensive Insulin Therapy in Critically III Adult Patients".

Samarkandy SJ, Al-Dorzi HM, Tamim HM, Arabi YM. Accepted for publication in Saudi Medical Journal.

#### **ATS 2010**

ATS 2010 meeting will be held in New Orleans, Louisiana in May, 2010. We are glad to announce that 13 abstracts were accepted for presentation. The ICU research committee congratulates all who helped in making this happen. The following abstract were accepted for presentation.

 "Ventilator Associated Pneumonia at a Tertiary Care Center in Saudi Arabia". Al-Dorzi HM, Al-Raiy

B, Rishu A, El-Saed A, Balkhy H, Memish Z, Arabi Y.

Thematic Poster Session- Poster

Presentation. Date: Sunday, May 16, 2010.

Time: 8:15 AM -4:00 PM.

 "Practices of Venous Thromboembolism Prophylaxis and Incidence in Critically III Cirrhotic Patients". Al-Dorzi HM, Bhat S, Tamim H, Khokar S, Hussain S, Al-Dawood A, Arabi Y.

Thematic Poster Session-Poster

Presentation. Date: Sunday, May 16, 2010.

Time: 8:15 AM-4:00 PM.

3) "Is Procalcitonin a Marker of Adrenal Insuffi ciency in Cirrhotic Patients with Septic Shock?"

Al-Dorzi HM, A. Rishu, Bouchama A., Dehbi M, Al-Jumah A, Arabi Y.

Thematic Poster Session- Poster

Presentation. Date: Sunday, May 16, 2010

Time: 8:15 AM-4:00 PM.

4) "Impact of Computerized Physician Order Entry (CPOE) System on ICU Mortality: A Before-After Study". Al-Dorzi HM, Cherfan A, Hassan M, AlHabib H, Sughayr A, Arabi Y, Taher S.

Poster Discussion Session-Poster Presentation.

Date: Sunday, May 16, 2010, Time: 1:30 PM-4:00 PM

5) "Comparison between Crisis Resource Management Skills and Medical Knowledge for Critical Care Physicians' Assessment".

Tlayjeh HM, Arabi Y, Al-Dorzi H, AlDawood A, Haddad S, AlSultan M, Qahtani S, Baharoon S, Diab A, Taher S.

Poster Discussion Session- Poster Presentation.

Date: Sunday, May 16, 2010, Time: 1:30 PM-4:00 PM

6) "Assessment of Critical Care Physicians using a Subjective Global Rating Scale of the ACGME Competencies versus a Simulation Based Cri-Sis Resource Management Scale".

Tlayjeh HM, Arabi Y, Al-Dorzi H, AlDawood A, Al-Dabbagh T, AlHamed HM, Haddad S, Baharoon S, Diab A, Taher S.

Thematic Poster Session- Poster Presentation.

Date: Sunday, May 16, 2010, Time: 8:15 AM-4:00 PM.

- 7) "Shock Relapse in Cirrhotic Patients Treated for Septic Shock: Predictors and OutComes". Arabi Y, Tamim H, Al-Dawood A, Jumah A, Dabbagh T, Baharoon S, Haddad S, AlSultan M Thematic Poster Session- Poster Presentation. Date: Sunday, May 16, 2010, Time: 8:15 AM-4:00 PM.
- 8) "Incidence and Outcomes of Venous Thromboembolism in Critically III Patients in a Medical Surgical Intensive Care Unit". Arabi Y, Bhat S, Shifaat G, Tamim H, Rishu A, AlDawood A, Al-Qahtani S.

Poster Discussion Session-Poster Presentation.

Date: Sunday, May 16, 2010, Time: 8:15 AM-4:00 PM.

9) "Analysis of Incident Reports in a Tertiary Care Center". Arabi Y, AlAmry A, AlDorzi H, Tlayjeh H, AlHabib H, Asad S, Taher S.

Poster Discussion Session-Poster Presentation.

Date: Sunday, May 16, 2010, Time: 1:30 PM-4:00 PM

10) "Implementation of Critical Care Response Team (CCRT) is Associated with Reduction of Inhospital Cardiac Arrests and ICU Readmis-Sions". Arabi Y, AlQahtani S, AlDorzi H, Gouda A, Asad S, Rabiee S, Macainan M, AlAmry A, Taher S, Al-Knawy B. Poster Discussion Session-Poster Presentation. Date: Sunday, May 18, 2010, Time: 8:15 AM-10:45AM

11) "The Impact of Implementing Critical Care Response Team (CCRT) on ICU Patient Mix and Outcomes". Arabi Y, AlQahtani S, Tamim H, Diab A, Rishu A, Fong L, Mohammed H, AlSultan M, Al Jabbary A, Taher S, AlKnawy B. Poster Discussion Session-Poster Presentation. Date: Sunday, May 18, 2010, Time: 8:15 -10:45AM

- 12) "Highlight on End of life issues in a muslim country". Gouda A, Al-Jabbary A, Fong L. Poster Discussion Session-Poster Presentation. Date: Wednesday, May 19, 2010.
  Time: 1:30-4:00 PM.
- 13) "Comparison of Different Case Definitions for Adrenal Insufficiency in Cirrhotic Patients with Septic Shock". Arabi Y, Jumah A, Dabbagh O, Tamim H, Rishu A, Abdulkareem A, Al-Knawy B, Hajeer A, Tamimi W, Cherfan A.

Thematic Poster Session-Poster Presentation.

Date: Sunday, May 19, 2010. Time: 8:15 AM- 4:00 PM.

# KAMC has enrolled 17 patients in DECRA Trial

DECRA is a multicentre, prospective randomized controlled trial in patients with severe Traumatic Brain Injury and refractory Intracranial Hypertension, comparing early Decompressive Craniectomy with the best current management. So far 152 patients have been enrolled in the trial.

KAMC has enrolled 17 patients in this trial so far with 100% follow up at 6 and 12 months.

KAMC ICU is looking forward to have the DECRA team members in their center.

#### An Educational Research visit from Australia

DECRA project manager, Murray Lynette along with her other colleagues, are visiting KAMC, Saudi Arabia on 25<sup>th</sup> of Feb 2010 as part of their site visit. Lynette will be in KAMC for 5 business days during which she will audit the patients enrolled so far. Also, she will present on various research related topics in KAMC.

Some of these presentations will be shared through webbased to other sites in the Kingdom including all the Saudi Critical Care Society Trial Group sites. The tentative programm for the presentation is as follows:

- 1. DECRA trial update.
- 2. The POLAR trial: A trial of early prophylactic hypothermia in severe traumatic brain injury.
- 3. The Alfred Hospital ICU experiences following the Black Saturday bush fires.
- 4. EPO-TBI: A randomised controlled trial of erythropoietin in traumatic brain injury (KAMC will be part of this trial).
- 5. The Alfred ICU Hospital research program
  Final programm will be sent to all and will be posted on
  the web?

#### **Question of this issue**

In our Permissive Underfeeding vs. Target Feeding Trial, a patient in the underfeeding arm will:

- A. receive 25% of calculated energy requirement for 7 days.
- B. receive 50% of calculated energy requirement for 7 days
- C. receive 40-60% of calculated energy requirement for up to 14 days
- D. receive 40-60% of calculated energy requirement for up to 14 days, IMCU days are included.

Look for the answer in this issue...

