



King Abdulaziz Medical City

ICU Research Newsletter





February 2013

Issue 14





Study shows benefits of intensivist-led rapid response teams

A study showed multidisciplinary rapid response teams led by intensivists reduced cardiopulmonary arrests and mortality and provided better end-of-life care when they followed patients until they were clinically stable or through discharge if transferred to an ICU. Researchers from Saudi Arabia reported in Critical Care Medicine that in-hospital mortality rates for ICU patients declined from 57.4% to 48.7%.

http://www.medwirenews.com/465/102990/ Emergency_and_critical_care_medicine/

<u>tended_involvement_maximizes_gains_from_rapid_response_tea</u>
<u>ms.html</u>

KSAU—HS, KAIMRC, KAMC IN A STUDY IN THE NEJM



KAMC-RD ICU is pleased to share with every body the results of the OSCILLATE study which was published as on-line first article in the NEJM.

This is another landmark study in the field of mechanical ventilation of patients with Acute Respiratory Distress Syndrome (ARDS). We are pleased that our center has participated in the pilot phase and in the definitive study and that our ICU is again a leading center in research in this important area.

Oscillate Team:

Dr. Yaseen Arabi, Dr. Haytham Tlayjeh, RT Department, Adel Musned, Othman Abahussein, Shatha Al Abbasi, Edgardo Tabhan, Olivia Trinidad, Charina Marie Olay, Mohammed Al Mesned, Abdullah Al Zahrani, Marwa Al Hazmi, Meshari Al Rubaian, Amer Al Zahrani, Tariq Al Shehri, Fuad Al Ghamdi, Abdullah Al Dhaish, Adel Al Otaibi

http://www.nejm.org/doi/full/10.1056/NEJMoa1215554

Amer Alzahrani receives a prize for his research project in our ICU department



Mr. Amer <u>Alzahrani</u>, a medical student, received a prize in the 4th Competitive Scientific Conference for KSAU-HS students which was held on 22nd of December, 2012. The winning presentation titled " **The Proportion Of Out-Of Range Endotracheal Tube And Tracheostomy Cuff Pressure In Mechanically Ventilated Patients**" was the outcome of a research project he did in our ICU under the supervision of Dr Yaseen Arabi.

A.R. Alzahrani, K. Al-Attas, S. Al Abbasi, T. Alshehri, O. Abahoussin, R. Khan, K. Shammout, T. Al Moammar, Y.M. Arabi

Issue Highlights

- A study from our department shows benefits of intensivist-led rapid response teams
- KSAU—HS, KAIMRC, KAMC IN A STUDY IN THE NEJM
- A medical Student received a prize in The 4th Competitive Scientific Conference for KSAU-HS Students
- Our Intensive Care Department new publications
- 33rd International Symposium on Intensive Care and Emergency Medicine: Poster Presentation
- Update on The Impact of Permissive Underfeeding versus Target Enteral Feeding on Morbidity and Mortality in Adult Critically Ill Patients Trial
- An Update about Erythropoietin in Traumatic Brain Injury (EPO-TBI)
- Eurotherm Trial
- ATS 2013
- What is BERKSON'S FALLACY? (By Dr Mohammad Khayr Khedr)
- Presenting A Study Result in KACST 28 Scientific Conference
- Goodbye to one of our colleagues
- Contributions
- Related Websites

Intensive Care Department Highly Accessed New Publications



Highly accessed

Open Access

1. <u>Status epilepticus and cardiopulmonary arrest in a pa</u> tient with carbon monoxide poisoning with full recovery after using a neuroprotective strategy: a case report.

Abdulaziz S, Dabbagh O, Arabi Y, Kojan S, Hassan I. J Med Case Rep. 2012 Dec 14

http://www.jmedicalcasereports.com/content/6/1/421

Intensive Care Department New Publications



1. <u>High-Frequency Oscillation in Early Acute Respirato</u> ry Distress Syndrome.

Ferguson ND, Cook DJ, Guyatt GH, Mehta S, Hand L, Austin P, Zhou Q, Matte A, Walter SD, Lamontagne F, Granton JT, Arabi YM, Arroliga AC, Stewart TE, Slutsky AS, Meade MO; the OSCILLATE Trial Investigators and the Canadian Critical Care Trials Group. N Engl J Med. 2013 Jan 22

http://www.nejm.org/doi/full/10.1056/NEJMoa1215554

2. <u>Coenrolment of critically ill patients into multiple studies: patterns, predictors and consequences.</u>

Cook D, McDonald E, Smith O, Zytaruk N, Heels-Ansdell D, Watpool I, McArdle T, Matte A, Clarke F, Vallance S, Finfer S, Galt P, Crozier T, Fowler R, Arabi Y, Woolfe C, Orford N, Hall R, Adhikari NK, Ferland MC, Marshall J, Meade M, Investigators FT, Trials Group OB, Trials Group TA. Crit Care. 2013 Jan 8

http://ccforum.com/content/17/1/R1/abstract

3. <u>Impact of an Intensivist-Led Multidisciplinary Extend</u> ed Rapid Response Team on Hospital-Wide Cardio pulmonary Arrests and Mortality.

Al-Qahtani S, Al-Dorzi HM, Tamim HM, Hussain S, Fong L, Taher S, Al-Knawy BA, Arabi Y. Crit Care Med. 2012 Dec 20

http://journals.lww.com/ccmjournal/pages/ articleviewer.aspxyear=2013&issue=02000&article=00016&type=abstract

4. <u>Status epilepticus and cardiopulmonary arrest in a pa</u> tient with carbon monoxide poisoning with full recovery after using a neuroprotective strategy: a case report.

Abdulaziz S, Dabbagh O, Arabi Y, Kojan S, Hassan I. J Med Case Rep. 2012 Dec 14

http://www.jmedicalcasereports.com/content/6/1/421

5. Permissive underfeeding versus target enteral feeding in adult critically ill patients (PermiT Trial): a study protocol of a multicenter randomized controlled trial.

Arabi YM, Haddad SH, Aldawood AS, Al-Dorzi HM, Tamim HM, Sakkijha M, Jones G, McIntyre L, Mehta S, Solaiman O, Sadat M, Afesh L, Sami B. Trials. 2012 Oct 12

http://www.trialsjournal.com/content/13/1/191

6. <u>Activated protein C and septic shock: a propensity-matched cohort study*.</u>

Rimmer E, Kumar A, Doucette S, Marshall J, Dial S, Gurka D, Dellinger RP, Sharma S, Penner C, Kramer A, Wood K, Ronald J, Kumar A, Turgeon AF, Hou ston DS, Zarychanski R; Co-operative Antimicrobial Therapy of Septic Shock (CATSS) Database Research Group. Crit Care Med. 2012 Nov:40

http://journals.lww.com/ccmjournal/pages/articleviewer .aspx?year=2012&issue=11000&article=00007&type=abstract 7. <u>Intra-abdominal pressure and abdominal perfusion</u> pressure in cirrhotic patients with septic shock.

Al-Dorzi HM, Tamim HM, Rishu AH, Aljumah A, Arabi YM. Ann Intensive Care. 2012 Jul 5

http://www.annalsofintensivecare.com/content/2/S1/S4

8. Trauma profile at a tertiary intensive care unit in Saudi Arabia.

Aldawood AS, Alsultan M, Haddad S, Alqahtani SM, Tamim H, Arabi YM. Ann Saudi Med. 2012 Sep-Oct

http://www.annsaudimed.net/index.php/vol32/vol32iss5/126.html?view=abstract

9. <u>Antimicrobial therapeutic determinants of outcomes</u>
<u>from septic shock among patients with cirrhosis.</u>

Arabi YM, Dara SI, Memish Z, Al Abdulkareem A, Tamim HM, Al-Shirawi N, Parrillo JE, Dodek P, La pinsky S, Feinstein D, Wood G, Dial S, Zanotti S, Ku mar A; Cooperative Antimicrobial Therapy of Septic Shock (CATSS) Database Research Group. Hepatolo gy.2012Dec

http://onlinelibrary.wiley.com/doi/10.1002/hep.25931/astract;jsessionid=E7697A723CCEF6509E3A875AD EE3A176.d04t03

10. <u>A Review of Large Animal Vehicle Accidents with</u>
Special Focus on Arabian Camels

Al Shimemeri A., Arabi Y Journal of Emergency Medicine, Trauma and Acute Care. Vol. 2012, 21. published 12 Sept 2012.

http://www.qscience.com/doi/abs/10.5339/jemtac.201 2.21

33rd International Symposium on Intensive Care and Emergency Medicine: Poster Presentation

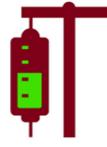


An abstract by Dr. Samir Haddad entitled:

' Impact of an Age, Kidney and Liver Function Adjusted Sedation Protocol in Critically Ill Patients '

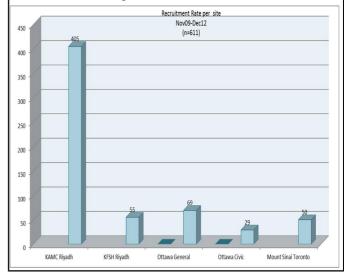
Has been accepted for poster presentation during the symposium and will be published online in the journal *Critical Care*.

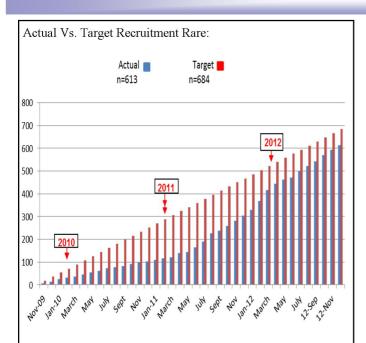
Update on "The Impact of Permissive Underfeeding versus Target Enteral Feeding on Morbidity and Mortality in Adult Critically Ill Patients" Trial



The recruitment for this trial is ongoing. More than six hundred and eleven patients have been enrolled so far at the ICUs from all sites.

Patients Recruitment per site:

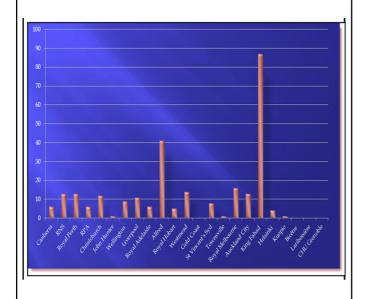




Erythropoietin in Traumatic Brain Injury (EPO-TBI) Trial



KAMC continue recruiting for the EPO-TBI Study with a total number of 87patients by the Saudi EPO-TBI team, which considered the highest recruiter center in this study. This achievement is the result of great efforts and commitment of the PI and study team including physicians, research coordinators, nurses and ultrasound technicians.





Eurotherm Trial:

Traumatic Brain Injury (TBI) results in bruising to the brain known as hematomas, contusion, swelling, herniation or compressed basal cisterns. The evidence from previous research shows that treatment with therapeutic hypothermia to reduce intracranial hypertension may improve patient outcome after TBI

The Eurotherm3235Trial is an international, multi-centre, randomised controlled trial which will examine the effects of titrated therapeutic hypothermia (32-35°C) as a treatment for raised intracranial pressure after traumatic brain injury. The trial will enrol patients who are admitted to the Intensive Care Unit. Eligible patients will be randomized to receive either:

the standard care for patients following traumatic brain injury standard care with therapeutic hypothermia (32-35°C). The IRB approval was obtained on 13 August 2012 and the team is preparing for the initial visit, which will be coming soon.

ATS 2013



American Thoracic Society

We help the world breathe

Sixteen abstracts from our Department were accepted for presentation at the International Conference of ATS which will happen in Philadelphia May 17-22. The details of these abstracts will be published in the next issue. Thanks to all who contributed to this success.

What is BERKSON'S FALLACY? (By Dr Mohammad Khayr Khedr)

When you have a sample not representative of the general population, you may find unreal associations especially in hospitals where patients with more severe diseases get admitted. If you analyze such data, you may find significant associations based on the rate of severe cases admission rather on true rate in the population. For example, you may find an association between gallbladder disease and hypertension. This is because patients with uncontrolled hypertension and people with gallbladder disease get admitted and are represented in the hospital more than in the general population. This problem is specific for case-control studies.

Presenting A Study Result in KACST 28



Scientific Conference

On February 19, in the 28 Scientific Conference titled by "Diabetes, Prevention and Precaution" at King Abdulaziz City for Science and Technology Dr. Arabi & Dr. Al Shimemeri presented "Permissive underfeeding and intensive insulin therapy in critically ill patients".

Goodbye to one of our colleagues

We recently said goodbye to one of our colleagues, **Dr Asgar Rishu**, who worked in the ICU for 6 years and was responsible for coordinating all research related activities. In the past years, KAMC-ICU Research has scaled heights with many success stories. Many research projects have been successfully completed and manuscripts have been submitted to high impact journals. Dr Asgar showed tremendous dedication, creativity and originality which helped him and the ICU research team in making each of these manuscripts a masterpiece. Asgar joined the University of Toronto to work as a research coordinator. We wish him good luck and hope he succeeds in all that he sets out to venture.

Contributions:

- Mrs. Lara Afesh
- Mr. Ahmad Deeb
- Dr. Musharaf Sadat

Related Websites

- 1. http://www.ksau-hs.edu.sa
- 2. http://www.kaimrc.med.sa
- 3. http://www.ngha.med.sa
- 4. http://www.ngha.med.sa/English/MedicalCities/AlRiyadh/Centers/ICU/Pages/default.aspx
- 5. http://sccs-sa.org/
- 6. http://uat.dv9.com/avf/
- 7. http://www.thoracic.org/
- 8. http://ajrccm.atsjournals.org/
- 9. http://www.sccm.org/Pages/default.aspx

