

Leading Qatari doctor discusses severe respiratory failure at WCM-Q Grand Rounds

Doha – January 4, 2017: One of Qatar’s leading doctors explained the latest therapies for the management of acute respiratory distress syndrome (ARDS) at the most recent installment of Weill Cornell Medicine-Qatar’s Grand Rounds series.

Dr. Ibrahim Fawzy Hassan, Corporate Director of Critical Care at Hamad Medical Corporation and Assistant Professor of Medicine at Weill Cornell Medicine-Qatar (WCM-Q), gave a detailed exposition of ARDS, which is a severe and life-threatening condition characterized by widespread inflammation of the lungs and fluid build-up in the air sacs (alveoli). This fluid in the alveoli inhibits gas exchange, preventing the lungs from taking up oxygen and releasing carbon dioxide and causing severe breathing difficulties.

ARDS can have many different causes, such as sepsis (serious blood infection), trauma, inhalation of harmful substances, or severe pneumonia. ARDS can be caused by H1N1 influenza-induced pneumonia.

Dr. Hassan said: “To treat ARDS you cannot just give oxygen therapy because alveoli that are filled with fluid are not going to respond. This will lead to severe hypoxemia (abnormally low oxygen concentration in the blood) so clearly a different rescue therapy is needed. The response should not be to give more and more oxygen but instead we need to open the alveoli and increase lung recruitment.”

Dr. Hassan also warned that giving too much oxygen to a patient with ARDS can cause oxygen toxicity, which in turn causes widespread organ damage. A number of treatment protocols for ARDS exist, explained Dr. Hassan, including a technique called extra-corporeal membrane oxygenation (ECMO). ECMO involves the use of a machine to extract blood from a large vein near the heart and artificially oxygenate the blood before returning it to the body. Essentially, the ECMO machine acts as an artificial lung.

ECMO was previously considered ineffective and was often used only as a last resort when all other treatments had failed. However, recent improvements in technology and enhanced understanding of the best way to administer the treatment have made ECMO far more effective, with recent research showing survival rates upwards of 70 percent in patients with ARDS, explained Dr. Hassan.

Another method for increasing lung recruitment that is often highly effective is far more low-tech, said Dr. Hassan, and simply involves careful positioning of the patient in the prone position with strategic placement of pillows.

He said: “Placing a patient with ARDS in the prone position can relieve the weight of heart and abdomen from the lungs, allowing for increased lung recruitment. It is a very cost-effective procedure that can sometimes remove the need for ECMO completely. However, it is important to have the facility to be able to use ECMO when necessary as it can be very effective indeed. We are fortunate that in Qatar we now have one of only two ECMO centers in the region.”

Dr. Hassan received his MD degree in Kiev, Ukraine, and completed his residency training at NewYork-Presbyterian/Weill Cornell Medical Center. Dr. Fawzy has won several awards, including the Alpha



Omega Alpha award from Weill Cornell Medical College and The Young Clinician of the Year award for the Middle East region from Cleveland Clinic, Ohio. In the light of the outbreak of Middle East Respiratory Syndrome (MERS), Dr. Hassan was instrumental in the development of the Severe Respiratory Failure ECMO Program at HMC.

The activity was an Accredited Group Learning Activity (Category 1) as defined by the Qatar Council for Healthcare Practitioners-Accreditation Department and was approved for a maximum of 1.00 hours.

Dr. Stephen Atkin, WCM-Q Professor of Medicine, said: "It is a great pleasure to welcome such a distinguished professional as Dr. Hassan to WCM-Q and to hear about these important developments in the treatment of acute respiratory distress syndrome. His work has been extremely important in bringing world-class treatment for ARDS patients to patients in Qatar."

- Ends -

Photo Caption:

Dr. Ibrahim Fawzy Hassan, Corporate Director of Critical Care at Hamad Medical Corporation and Assistant Professor of Medicine at Weill Cornell Medicine-Qatar

About Weill Cornell Medicine - Qatar

Weill Cornell Medicine - Qatar is a partnership between Cornell University and Qatar Foundation. It offers a comprehensive six-year medical program leading to the Cornell University M.D. degree with teaching by Cornell and Weill Cornell faculty and by physicians at Hamad Medical Corporation (HMC) and Aspetar Orthopedic and Sports Medicine Hospital who hold Weill Cornell appointments. Through its biomedical research program, WCM-Q is building a sustainable research community in Qatar while advancing basic science and clinical research. Through its medical college, WCM-Q seeks to provide the finest education possible for medical students, to improve health care both now and for future generations, and to provide high quality health care to the Qatari population.

For more info, please contact:

Hanan Lakkis

Media Relations Manager

Weill Cornell Medicine - Qatar

Mobile: +974 55536564

Direct Line: +974 44928661

hyl2004@qatar-med.cornell.edu

