



FORTIS MALAR HEART CENTRE SAVES LIFE OF A PATIENT WITH CARDIAC ARREST USING A NEW ARTIFICIAL HEART PUMP

Chennai May 22, 2012: Fortis Malar Hospital recently employed Extra Corporeal Membrane Oxygenation (ECMO) technology to save the life of a 56 year old man who suffered a massive heart attack. Though gaining ground in the West, this technology is relatively new to India. The team of Fortis Malar doctors led by **Dr. K.R Balakrishnan - Director of cardiac sciences; Dr. R. Ravi Kumar - Senior Consultant- Interventional Cardiology; Dr. Madan Mohan - Interventional Cardiologist Dr. Suresh Rao K.G. - Head-Cardiac Critical Care & Cardiac Anesthesia** and **Dr. Nandkishore Kapadia - Senior Consultant-Cardiac Surgery;** worked together to save his life.

The doctors encountered the 56-year-old gentleman who was in a state of circulatory collapse after suffering a massive heart attack. Soon after admission he had a cardiac arrest which needed CPR and external cardiac massage. Because of the possibility of near certain death in this scenario, without more aggressive treatment, Doctors decided to support his circulation using a small portable sophisticated artificial heart pump called **Extra Corporeal Membrane Oxygenation (ECMO)**.

This pump was made available in an assembled condition at Fortis Malar Hospital by the cardiac surgical team under Dr. K. R. Balakrishnan & Dr. Nandkishore Kapadia. In an attempt to improve heart circulation, the patient subsequently underwent an angioplasty in the cath lab by Dr. Ravi Kumar and Dr Madan Mohan , Cardiologists. The whole process was supervised under the expert guidance of Dr. Suresh Rao K.G., Chief Critical Care, who was also instrumental in taking care of the patient in the Intensive Care Unit.. The patient responded well to the treatment.

Heart is a pump made of smooth muscle whose constant function is necessary to keep all organs of body healthy. Massive heart attack (large acute myocardial infarction) has a high



possibility of death even if patient reaches the hospital alive. Cardiac Pump failure (cardiogenic shock) can occur at anytime after heart attack and this has a mortality of over 90%. Emergency angioplasty (PTCA) may not work in cardiogenic shock because, many times the heart muscle does not recover fast enough for all organs to remain healthy.

Commenting on the procedure, Chief Cardiac Surgeon - Dr. K. R. Balakrishnan said, *“ECMO technologies have great potential to save lives in and out of hospital especially in cardiac arrest situations following heart attacks. I foresee great potential for this technology in the near future in countries like India with extremely high incidence of untreated coronary disease”*.

Using **powerful new technologies** currently available like **“artificial heart pump (ECMO)”**, the patient’s circulation can be supported for as long as upto one month. This gives much needed time for vital organs like brain, kidney, liver and heart to recover and function normally. ECMO (Extra Corporeal Membrane Oxygenation) can also be used in patients with badly damaged lungs as in H1N1 influenza and infants with meconium aspiration. This highly effective technology has great potential to save a lot of lives in emergencies and has been proved to be of great benefit in western countries like France and USA. This equipment can take over the function of heart and lung. Hence it is useful when the heart fails as in heart attack or when the lung fails as in case of H1N1 infection.

About Fortis Malar Hospitals Ltd (erstwhile Malar Hospitals Ltd)

Fortis Malar Hospitals Ltd is established as one of the largest corporate hospitals in Chennai providing quality super specialty health care services. Fortis Malar Hospitals, with 180 beds, focuses on providing comprehensive medical care in the areas of cardiology and cardiac surgery, Neuro Surgery, gynaecology, orthopaedics, gastroenterology, neurology, pediatrics, diabetics, nephrology and Urology. All health care needs are delivered here by the best of doctors.

Fortis Malar Hospitals also has a state of the art Cath Lab and multiple dedicated cardiac operation theatres and intensive coronary care units. Several rare and complex Adult and Pediatric Cardiac surgeries, Orthopedics and Joint replacement, Neurosurgery and Plastic & reconstruction surgeries have been performed in this hospital. The hospital’s Obstetrics and Gynaecology services are among the busiest in the city, performing many difficult deliveries and surgeries successfully, and are



supported by a dedicated Neonatology unit. Fortis Malar Hospitals is a part of the Fortis Health care Network which is currently the largest hospital network in Asia Pacific with 74 hospitals and 12,000 beds.