

Robotic cardiothoracic surgery in Pakistan: A novel minimally invasive form of patient careSyed Hassan Abbas Naqvi,¹ Asfandyar Sheikh,² Syed Hassan Shiraz Naqvi,³ Kainat Sheikh⁴

Madam, cardiovascular disorders are the leading cause of death worldwide. Technological advances have led to a marked reduction in the morbidity and mortality of cardiac patients. Novel techniques, which involve the use of robotics, have revolutionised the field of cardiac surgery, by increasing survival time and by reducing both the number and the severity of post-surgical complications frequently associated with the employment of traditional methods.

The major advantages of robotic surgery are: to narrow the limitations seen with laparoscopic surgeries; to substantially decrease the recovery time with reduced post-operative hospital stay; and faster return to normal activities of the patient. Furthermore, this newly introduced robotic system has the added benefit of avoiding splitting of the breast bone as well as minimising post-surgical scarring. It functions by docking 5 arms which are then able to make precise movements required for complex cardiothoracic procedures.¹ The incisions made on the thoracic wall are key-hole sized, therefore demonstrating the minimal invasiveness of this form of treatment.²

Currently, the use of these robots for complex

cardiothoracic procedures is increasing very rapidly worldwide. Unfortunately, this form of care is rare in Pakistan, limited only to major urban tertiary care centres and unavailable for a large fraction of the general population. We believe that more robots should be placed in government hospitals to provide better quality and more widespread care for patients. In Pakistan, cardiothoracic diseases are one of the most frequently encountered reasons for surgery and hospital visits, and patients are often put on a waiting list due to overcrowding. As previously mentioned, our proposed approach allows for a higher efficiency of care and decreased duration of hospital stay for patients, resulting in freeing of hospital beds, and eventually allowing new patients to acquire the necessary treatment promptly.³

For this notion to be successful, it is imperative that the government of Pakistan takes joint effort with the provincial and federal hospitals. Together, they should propose an appropriate budget to purchase this novel robotic system, and adopt appropriate strategies to implement the practice of this new technology for complex cardiothoracic procedures.

References

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