## Masterclasses

M9.4

## **Advances in Colorectal Cancer Management**

09:00

**Room 221** 

## **Robotic Surgery Service**

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In the recent two to three decades, we have witnessed rapid advances in minimally invasive surgery in the treatment of colorectal cancer. Significant improvement in postoperative recovery without compromising the oncologic outcome has been achieved. In Hong Kong, there is a wide application of minimally invasive surgery for colorectal cancer and over 60% of colorectal resections are performed using laparoscopic approach in Hospital Authority (HA) hospitals.

However, rectal cancer surgery is a challenging procedure and the quality of the operation has significant impact on the oncologic outcomes. The laparoscopic approach is possible but this is a complex operation with a steep learning curve. This results in a high conversion rate and a suboptimal specimen in laparoscopic resection.

Robotic assisted surgery has been demonstrated to overcome some limitations of conventional laparoscopic rectal cancer surgery. The stable platform with 3D vision together with versatile instruments, which possess 7 degrees of freedom of movement, make robotic-assisted surgery very suitable for pelvic dissection.

Robotic surgery has been increasingly applied to rectal cancer surgery and favourable results have been reported worldwide. In Hong Kong, robotic rectal cancer surgery began more than 10 years ago and now it is commonly applied in hospitals which have the surgical robotic system. A credentialing system for the surgeons has also been developed in the HA.

We have performed over 300 cases in Queen Mary Hospital and favourable results have been achieved. Robotic rectal surgery is associated with low conversion rate and confers the benefit of better autonomic nerve preservation. The rate of positive circumferential margin is also low. Moreover, the procedure is associated a short learning curve for young novice surgeons. The long-term survival is comparable to laparoscopic resection. More complex procedures can be performed with the surgical robotic system.