



Robotic surgery: A promising paradigm shift for selected candidates with gynecologic diseases

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In recent years, with the concepts of minimally invasive surgeries (MIS), the treatment of diseases has gradually evolved from traditional open surgery to endoscopic minimally invasive surgery. Since the first generation of Da Vinci robots was developed in 1996, by 2019, the cumulative number of Da Vinci robots worldwide has reached 5,582. Among them, 596 units were added in 2019, a year-on-year increase of 11.95% [1]. On average, every 26 seconds in the world, a doctor uses Da Vinci for surgery.

Recently, an original article in this issue studied over 12,000 surgical cases from the 14 hospitals about the utilization rate of robot platforms during the past 13 years in South Korea [2]. The annual data showed the rate and volume for both single-site and multiport robotic surgeries increased steadily in benign and malignant tumors. In gynecological surgery, including gynecological malignant tumors, the scope of approved surgery is getting wider and wider, and the amount of surgery is increasing year by year. It greatly expands the skill boundaries of surgeons, significantly reduces the work intensity of surgeons, completes surgical actions far exceeding human accuracy, greatly in-

creases the scope of surgical applications, and increases the success rate of surgery.

Despite the early-stage cervical cancer in Laparoscopic Approach to Carcinoma of the Cervix trial which is a challenge for MIS due to the lower disease-free survival and overall survival rates compared to open radical hysterectomy surgeries published in 2018. This disadvantage might be minimized by reducing the tumor traction and careful colpotomy with the skillful surgeons.

Although the cost-effectiveness of robot-assisted surgery is still debatable, there are numerous robotic device companies rushing into the market with a lower price, e.g., REVO-1 system from Mere company is one of these suppliers with a lower price compared with the Da Vinci systems. It is believed that robotic surgery system is a boon to surgeons and both surgeons and patients' lives will benefit a lot from it.

References

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