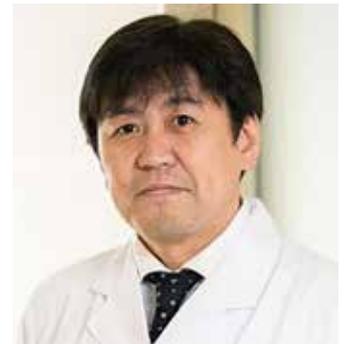


In these twenty years, surgical treatments have been dramatically developed from open surgery to endoscopic surgery worldwide. Innovative techniques such as reduced port surgery, NOTE, trans-anal surgery or robotic surgery came to our clinical fields in these ten years. We watched some of them grew bigger and others were disappearing at that time.

Nowadays, many colorectal surgeons became to believe the clinical benefits not only in the minimum invasiveness but also in oncological outcomes laparoscopic surgery potentially had. Some qualified clinical trials were conducted in colon cancer and the long-term outcome in laparoscopic surgery was comparable to open surgery. However, recent clinical studies shown in rectal cancer had different results from colon cancers. COLOR II and COREAN trial concluded the good oncological results in laparoscopic surgery for rectal cancer treatment but, Australian trial and US trials shown in last year indicated that curative resection rate in laparoscopic surgery group was worse than one in open surgery. We should recognize the caution they made in laparoscopic surgery for rectal cancer and some technical difficulties in laparoscopic surgery might be one of the causes of the limitations. To overcome such a situation, well educational system should be provided for surgeons all over the world.

The Recent laparoscopic approach has been applied to advanced procedures and an intersphincteric resection, pelvic side-wall dissection and trans-anal procedures were expanding in clinical fields of rectal cancer treatment which could make numbers of patients with rectal cancer preserved their anus and the functions. Furthermore, robotic devices will be also expected to expand in future market of surgical fields in a few years. Actually, some international companies are creating new devices. The Clinical trial using available robotics showed that there was a little benefit in surgery performed by robots than by conventional laparoscopic surgery. This might indicate differences in surgical procedures between by robot and by human get less after surgeon's learning for laparoscopic skills was achieved. Robotic technology must be improved from now and surgeons would begin to use the new innovative devices.

Finally, we would like to hope the recent works included in this book would penetrate to clinical field deeply.



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