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REVIEW

ENDOSCOPIC SURGICAL SKILL QUALIFICATION SYSTEM (ESSQS) OF THE JAPANESE SOCIETY OF ENDOSCOPIC SURGERY (JSES)

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The sensational reports on the success of Laparoscopic Cholecystectomy in France and the United States in 1989 prompted the rapid increase in the number of surgeons who offered endoscopic surgical procedures to their patients throughout the world. In Japan, the popularity of endoscopic surgeries has also exploded since the first laparoscopic cholecystectomy was successfully performed in 1990 and the Japanese Society of Endoscopic Surgery (JSES) was established in 1991.

In the initial stages of the JSES meetings, the majority of the papers presented were reports of cases in which endoscopic surgery was successfully carried out, but at the same time, it was explained that many cases were converted to open surgery or re-operated with intra-operative or postoperative complications.

The most popular claims encountered in the initial stages of the JSES were intraoperative accidents or complications caused by procedures performed beyond their expertise or institutional capabilities, insufficient intraoperative consultation, inadequate supervision of trainees, unsafe introduction of new technologies, communication failures and so on. Therefore, programs including animal laboratory and training seminars were organized to discuss plans to prevent these serious situations.

The JSES finally made a decision, after serious repeated discussion focused on “How to train surgeons for endoscopic surgery” as follows:

1) the best training must provide trainees with a set of knowledge, skills and attitudes that underpin specific competencies for Endoscopic Surgery and 2) Trainers should convince trainees that a low standard of care causes harm to patients including (a) missing the problem or failure to take due care, and (b) failure to act in time, including inhibition of conversion, (c) not referring to an expert in good time, (d) poor cooperation with surgical staff, which is inexcusable in all cases, in order to reduce failure in practice to the minimum, as shown in conventional training systems.

Furthermore, the JSES stressed the fact that trainers have to teach trainees the surgical principles established by open surgery and tricks to help them manage difficult situations and the at-

titude necessary for surgeons towards all situations encountered during conventional open surgery, because these issues have not changed in the era of endoscopic surgery. Therefore, in order to meet their own professional responsibility as a trainer of endoscopic surgery, they have to make every effort to advance their own endoscopic surgical skills, as well as to train beginners and medical staff, to provide the best treatment for their patients.

What requirements should be fulfilled before solo endoscopic surgery?

In this regard, the JSES finally decided to establish the Endoscopic Surgical Skill Qualification System (ES-SQS) which is a system for those who wish to acquire the privilege of an endoscopic surgeon, who need to achieve a fixed standard defined as the ability to be able to complete the most popularized endoscopic surgeries, by his/her own efforts for the patients, in order to spread Endoscopic Surgery in JSES in 2001. This final rule, approved by JSES, was also accepted by the groups of general surgeons[1], urologists[2], pediatric surgeons[3] gynecologists and orthopedists, and it was adopted in 2003, for the further popularization of Endoscopic Surgery. This concept was fully accepted by the members of societies, including surgery, gynecology, urology and orthopedics, with mutual consent. The committee members of the system were individually elected from their own mother societies and the bylaws of this system were established individually. Moreover it was also confirmed mutual agreement that a certificate could be given to those who wish to have a certificate issued by JSES. Applicants who want to have the privileges of endoscopic surgeons are required to submit certain documents, including a letter certifying 2 years of uninterrupted endoscopic surgical practice after completion of all formal training, a certificate of membership of the JSES, and the special board of the Japan Society of Surgery, certificates of attendance of meetings and seminars held under the auspices of the JSES, a bibliography showing papers presented at the meetings or papers published in the authorized journals of the JSES, in addition to a list of endoscopic surgeries the applicant has performed by himself or herself over the last 3 years, together with an unedited Video, showing the surgery carried out by his or her own effort, and suturing and knotting techniques the applicant performed by him or herself. They are all screened and evaluated very seriously by committee members elected from individual Committees in order to make a final decision. For video evaluation, two judges, elected from the individual society, review the video using a score sheet, with detailed checking points and mark allocation. Checking points are divided into 2 parts consisting of: “common criteria” for basic endoscopic techniques commonly used for all procedures, and “organ-specific criteria” for special endoscopic surgical techniques for individual organs. The allotted marks for each criterion are 60 and 40 points respectively. The evaluation is focused on surgical techniques and camera work and a total score of 70 points is designated as the pass mark.

The number of certificate holders certified in the field of Gastroenterological Surgery during the period from 2003 to 2012 is around 1,000, with an average success rate of around 50%. The main reason for the low success rate is attributable to their mainly immature techniques including careless handling of organs with inadequate instruments, or an inadequate operative field and a lack of communication among operators.

We believe that laparoscopic surgery in Japan has been steadily growing in a sound direction, through the active participation of surgeons qualified by this system, in order to meet their own professional responsibilities as trainers in endoscopic surgery.

We are proud that the Japanese system, known as the “Endoscopic Surgical Skill Qualification System (ES-SQS)” is smoothly moving forward to bring endoscopic surgery in the right direction, with the close cooperation of a group of surgeons, Urologists, Gynecologists and Orthopedists.

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