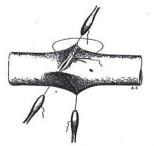
Early exposure of operative techniques for future surgeons -The basics for vascular sutures by microscopes-

Surgical techniques have been changing thanks to the developments of various surgical devices. It was back in 1900s that the so-called "Direct" technique had been developed as a basic operative one to have been converted recently to the "Indirect" technique, which mainly consists of observation of operative fields on electronic screen by the endoscope with which resecting infected part by forceps and suturing it after resection have been performed.



(Alexis Carrel 1902)

On the other hand, as a basic technique of organ transplantation, in 1902, 3-point support anastomosis method was introduced by the Novel prize winner, Alexis Carrel and had been commonly used.



It is operative by magnifier in case the diameter of blood vessels ranges within a certain size, however, in case of facing with damages due to the delicate vessels and intima, microscope plays a major role.

Although hands-on training is essential for vascular sutures by microscope, the below is why young doctors and medical school students should learn it in the early stage of their careers:

1. Endowing with the doctrine of eliminating the usage of experimental animals for the purpose of polishing surgical techniques.

It is utterly rational that we should minimize as much as possible the abuse of living experimental animals for mastering surgical operations as well as human patients. Nevertheless, without these experiences, the level of techniques is not to be enhanced and ended up with inability to deal with difficult operations. The hands-on seminar we sponsor will give a helping hand for the above contradiction by providing artificial blood vessels with the human-like texture.

2. Patients always look for doctors endowed with top-notch surgical techniques.

It means that it would be extremely important for doctors to be conscious of their own technique level not only for gaining self-discipline, but also for getting acquainted with expert doctors in a certain medical field with whom they can consult when they confront with such a challenging case.

3. Early-stage experience on "Indirect" technique

Currently endoscopes used by internal medicine and techniques for endoscopic and robotic operations are considered to be unsynchronized (indirect) methods due to the fact that the visions on the screen are not matched with the manipulation of hands. The degree of proficiency is deeply related how soon doctors start learning same as that of leaning sports.

On 4th of June 2016, Hands-on seminar sponsored by the West Japan Chapter of the International Society for Experimental Microsurgery (ISEM) (Prof. Shinji Uemoto, Kyoto University School of Medicine) will be held. We all welcome the participation of medical school students for the above reasons.

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