

The Future of Sentinel Node Oriented Tailored Approach in Patients with Early Gastric Cancer

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After the introduction of sentinel node biopsy (SNB) concept in early gastric cancer (EGC) more than decade, it is not yet a practically acceptable procedure in the same manner as breast cancer or melanoma.(1–3) In this issue, Dr. Miyashiro critically reviewed the practical problem and current status of SNB in EGC and suggested more sophisticated methods.(4) The debating points made in this review article by Dr. Miyashiro is that which is commonly accepted by the consensus of the surgical society. For the optimistic future of SNB in EGC, several ideas need be shared with researchers throughout the world.

The first consideration is that the protocol of SNB should be universally applicable. A highly standardized protocol of surgical procedure and pathologic evaluation cannot be adopted in all institutions, even with the satisfactory accuracy of SNB. The protocol, which can be done only by a specialized center, is not ideal and we should develop a more practical method that can be performed by a wider range of institutions.(5)

The second consideration is that the end goal of SNB in EGC surgery is the preservation of organ and its function by minimizing lymph node dissection (LND). In contrast, SNB in breast cancer and melanoma is performed to prevent lymphedema by minimizing LND. In the context of SNB, the pick-up method is more appropriate rather than the basin dissection. However, the

pick-up method is somewhat limited in terms of sensitivity in EGC. If we can accurately diagnose the lymph node metastasis and the organ and function preserving surgery by basin dissection, it is the alternative method of pick-up method. In the era of minimally invasive surgery, most of EGC is now operated with laparoscopic surgery and the difficulty of pick up biopsy by laparoscopy should also be considered.(6,7)

The third consideration is the issue of the qualifying involved surgeon, endoscopist, pathologist and institution. The qualification is usually estimated by case number of practice, which serves as a representative of the learning curve.(8) However, the qualification cannot not be estimated merely by the case number because personal and institutional learning curves are different each other and should be measured by somewhat objective protocol.

After two multicenter trials of SNB in Japan, we have invaluable lessons and can prepare for the prevention against defects and problems.(4,9,10) For the confirmation of clinical applicability of SNB in EGC, multicenter phase III trial should be mandatory. Recently, Korean surgical societies are now preparing trials of sentinel node oriented tailored approach (SENORITA trial) comparing the conventional laparoscopic gastrectomy versus laparoscopic SNB, with the organ and function preserving surgery of EGC. Before the randomized controlled trial, a qualification study of participating institutions will be done by measuring the completion of each critical step of SNB protocol.(11)

Several practical obstacles should be corrected by the evidence-based approach for the optimistic future of SNB. For an improved quality of life in the long-term surviving EGC patient, organ and function preserving surgery is essential and indispensable by applying SNB in the future.

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