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Secondary sentinel lymph node tracing technique: a new method for tracing lymph nodes in radical gastrectomy for advanced gastric cancer

Key words: **Secondary sentinel lymph node (SSLN), Advanced gastric cancer (AGC), Individual lymphadenectomy, Survival analysis**

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Basic Concepts

SLNs refer to those lymph nodes which are the first to directly receive the lymphatic drainage of primary tumors and which are most likely to contain metastases. SSLNs refer to those SLNs which are identified according to the basic methods for detecting SLN, and by injecting tracer into the peripheral tissue of metastatic lymph nodes to trace lymph nodes which are beyond those metastatic lymph nodes.

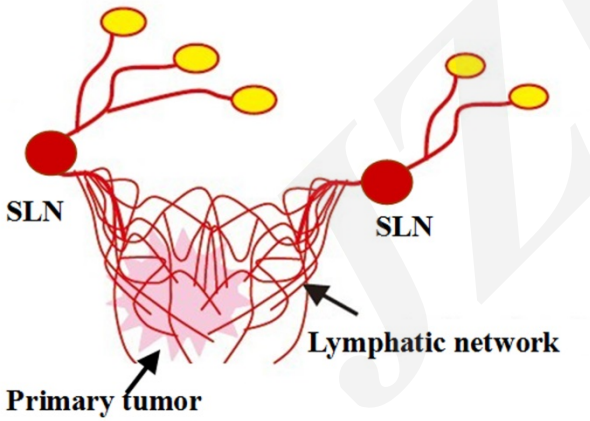

Fig.1 Schematic diagram of sentinel lymph node (SLN)

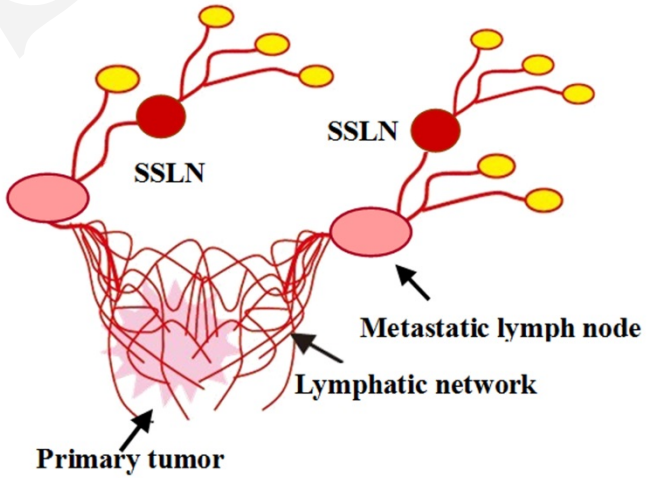

Fig.2 Schematic diagram of secondary sentinel lymph node (SSLN)

Innovation points

we proposed the concept of SSLNs and used the SSLN tracing technique to research AGC aiming at providing some scientific basis for individual lymphadenectomy in radical gastrectomy of AGC.

Conclusions

The SSLN tracing technique is feasible in radical gastrectomy for AGC. It gives surgeons important information about the terminal status of lymph node metastasis and provides some scientific basis for individual lymphadenectomy.

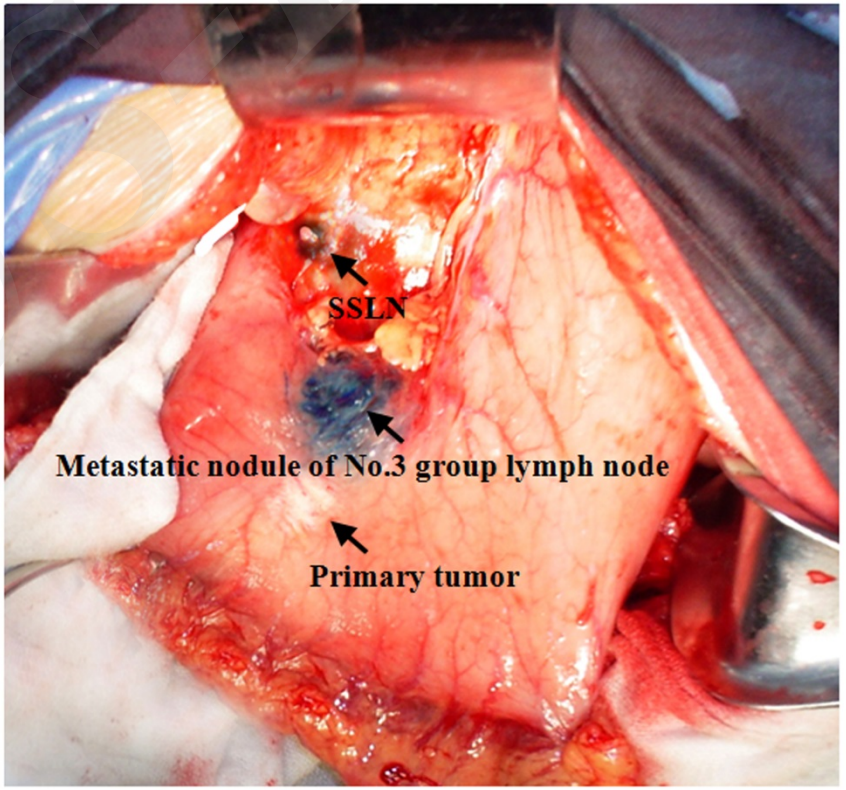

Fig.3 Secondary sentinel lymph node (SSLN) tracing during operation