Chapter 7

THE PLACE OF PARA-AORTIC LYMPH NODE DISSECTION (PAND) IN GASTRIC CANCER SURGERY

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INTRODUCTION

Gastric cancer is responsible for about 7 millions of death every year world-wide (Kamangar F, Dores GM & Anderson WF,2006). Lymph node metastasis is considered as one of the most significant prognostic factors in gastric cancer. D2 lymph node dissection is practiced as the standard surgical therapy, actually all around the world but it is more common in the east(Sasako M & et al,2006). Para-aortic lymph node (PAN, no:16) is the final station where lymph nodes drain into. (N3) It is known as distant metastasis and %18-40 PAN metastasis is observed in advanced stomach cancer(Japanese Gastric Cancer Association 2006, Isozaki H & et al,1999 ,Takashima S & Kosaka T,2005).

DEFINITION

Para-aortic lymph node dissection represents the total removal of all lymph nodes following D2 lymph node dissection, namely, 16a2 (PALNs between the level of the celiac axis and left renal-vein) and 16b1 (PALNs between the left renal vein and inferior mesenteric artery). (If distal gastrectomy would be implemented, dissection of the left upper lateral nodes 16a2-lat should be sufficient(Japanese Gastric Cancer Association,2017, Sano T & et al,2004) .Para-aortic lymph node dissection is addressed in the literature with various names such as PAND, D3, R3 Para-aortic lymph node dissection.

HISTORY

It was revealed 100 years ago by the biologists named Halsted, Moynihan and Snow that lymphatic system was effective in distal metastasis by serving as a filter holding cancer cells (Halsted WS. I,1907, BG M,1908, Neuhaus SJ, & et al,2004). Removal of perigastric lymph nodes in stomach cancer was adopted by Japanese surgeons and adhered as the main principle of cancer surgery.

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surgery with sole chemotherapy in patients with para-aortic lymph node involvement and is still continuing (started in 2016, planned to be completed in 2021.) Arm A: Surgery will be performed 4-6 weeks after preoperative chemotherapy, 4-8 cycles of FLOT will be implemented post-operatively, if necessary. Arm B: 4-8 cycles of FLOT will be implemented, surgical interventions might be permitted only for palliative purposes.(FLOT5,2015)

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