



SYSTEMATIC NODAL DISSECTION FOR LUNG CANCER BY MINIMALLY INVASIVE OPEN SURGERY (MIOS)

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Technically, systematic nodal dissection (SND) involves complete excision of all tissues in a particular anatomical compartment along with a few components of surrounding anatomical structures. An ideal technique involves en bloc removal of all tissue that may contain cancer cells, including lymph nodes and surrounding fatty tissue within pre-defined anatomical landmarks. All of lobectomies for NSCLC are performed via posterolateral incision using minimally invasive open surgery (MIOS) approach in our institution. Common to both sides, the fourth or fifth intercostal space provides better access in SND. During the SND, special care is warranted to prevent interruption of the lymphatic vessels and/or injury to the lymph nodes themselves. Additionally, connective tissue ligation is necessary in a few cases to prevent postoperative chylothorax. Identification of the bilateral recurrent nerves is important because recurrent nerve paralysis can cause serious postoperative complications. Based on AOSOG Z0030 trial, complications of SND include postoperative chylothorax (1.7%), intraoperative bleeding (1.1%), and recurrent laryngeal nerve injury (0.9%).