special symposium: diagnostic and therapeutic challenges in thoracic malignancies

OPTIMAL ASSESSMENT OF AN ADDITIONAL LUNG NODULE IN A PATIENT WITH POTENTIAL FOR CURE

C. Dooms
Department of Pulmonology and Leuven Lung Cancer Group, University Hospitals Leuven - Campus Gasthuisberg, Leuven, BELGIUM

A significant number of patients present with a dominant pulmonary mass or presumptive lung cancer with an additional radiologically visible intra-pulmonary nodule. The IASLC stage classification of T3 (nodule within same lobe), T4 (nodule within other ipsilateral lobe) and M1a (contralateral nodule) is applied for these patients. It is very difficult to say what the frequency is of early lung cancer with an additional pulmonary nodule. Several studies estimated the prevalence of an additional nodule coexisting with potentially operable lung cancer on imaging between 20 and 25% of patients, in whom 25-30% is malignant. Additional nodules account for only 2.5% of cases included in the 7th edition of the IASLC staging database. It is unclear what proportion is grossly detectable instead of only pathologically reported. In addition, the T3/T4/M1a additional nodule stage classification should not be applied to synchronous second primary lung cancers (SPLC) or lesions that are imaged but most likely benign such as subcentimeter intrapulmonary lymph nodes. The distinction between synchronous SPLC and intrapulmonary metastatic disease has relied upon Martini and Melamed’s approach. More recently, the hypothesis of field cancerization in the lung has made acceptance of synchronous SPLC easier. Additional nodules judged as synchronous SPLC should be staged with separate TNM designations. Patients with an additional lung nodule should be evaluated by an experienced multidisciplinary tumour board. The biological relationships between the lesions does matter in terms of our traditional thinking around staging and therapy. A careful evaluation for distant and mediastinal metastases is strongly recommended. The evaluation for possible extrathoracic metastases should be carried out by an integrated PET/CT and brain MRI/CT. In the absence of extrathoracic distant metastases, an invasive mediastinal evaluation either by mediastinoscopy or endosonography should be carried out. No further invasive diagnostic workup of the T3 or T4 additional nodule is undertaken for an operable patient. Patients unable or equivocal to undergo a contralateral surgical resection should undergo an endoscopic or percutaneous biopsy of the M1a additional nodule.

Disclosure: The author has declared no conflicts of interest.