SURGICAL STAGING

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Abstract: Malignant mesothelioma is a rare malignant tumor arising from serosal surfaces that can affect the pleura, peritoneum, tunica vaginalis, and pericardium. The most common type is malignant pleural mesothelioma (MPM), which accounts for about 65% of all malignant mesotheliomas. The majority of cases of MPM are related to the exposure of amphibole asbestos.
Although MPM is a relatively rare malignancy, the incidence has slightly increased over the last decade because of a lag of time in tumor development. The reported incidence is highest in industrialized countries, especially in countries such as UK, Australia, and Belgium, where asbestos was widely used in many industries in the past. Data on the incidence of MPM in developing and newly industrialized countries are lacking and often difficult to obtain; however, available data show relatively higher incidences in countries such as Brazil, Russia, and China, where regulations around asbestos exposure are less strict.
The WHO 2015 classifies MPM into three major histologic subtypes: epithelioid, biphasic, and sarcomatoid (including those with desmoplastic features).
The prognosis of malignant mesothelioma is poor; median overall survival rates of epithelioid MPM are between 12 and 27 months after diagnosis, sarcomatoid and biphasic mesotheliomas have even poorer prognosis than the epithelioid subtype.
The International Association for the Study of Lung Cancer (IASLC) mesothelioma staging project experts have updated their initial findings using prospective data on >3500 patients including surgically and nonsurgically treated.

In those patients suitables for multimodal treatment including surgery we need a staging before treatment. It is crucial to stage correctly to select cases for surgery.
Prior to radical surgery it is recommended to do a mediastinoscopy, a laparoscopy and contralateral VATS and also, a Chest, abdominal and Brain MRI.
In this session we will show tips and tricks of minimally invasive staging surgery procedures to select cases before surgery.

REFERENCES:

1- Bridda A, Padoan I, Mencarelli R, et al.: Peritoneal mesothelioma: a review. MedGenMed. 20 Robinson BW, Lake RA: Advances in malignant mesothelioma. N Engl J Med. 2005
2- Robinson BM: Malignant pleural mesothelioma: an epidemiological perspective. Ann Cardiothorac Surg. 2012
3- Baas P, Fennell D, Kerr KM, et al.: Malignant pleural mesothelioma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Ann Oncol. 2015
4- Frank AL, Joshi TK: The global spread of asbestos. Ann Glob Health. 2014
5- Hashim D, Boffetta P: Occupational and environmental exposures and cancers in developing countries. Ann Glob Health. 2014
6- Nicholson AG, Sauter JL, Nowak AKET AL. EURACAN/IASLC Proposals for Updating the Histologic Classification of Pleural Mesothelioma: Towards a More Multidisciplinary Approach. J Thorac Oncol 2020
7- Pass HI, Giroux D, Kennedy C, et al. Supplementary prognostic variables for pleural mesothelioma: a report from the IASLC staging committee. J Thorac Oncol 2014 Pilling JE, Dusmet ME, Ladas G, et al. Prognostic factors for survival after surgical palliation of malignant pleural effusion. J Thorac Oncol 2010;5:1544-50.
8- Stanging Handbook in Thoracic Onocolgy Nowak AK, Chansky K, Rice DC, et al. The IASLC Mesothelioma Staging Project: proposals for revisions of the T descriptors in the forthcoming eighth edition of the TNM classification for pleural mesothelioma. J Thorac Oncol 2016
9- Scherpereel A, Opitz I, Berghmans T, et al. ERS/ESTS/EACTS/ESTRO guidelines for the management of malignant pleural mesothelioma Eur Respir J 2020
10- Trujillo-Reyes JC, Martínez-Téllez E, Rami-Porta R et al. Combination video-assisted mediastinoscopic lymphadenectomy and transcervical thoracoscopy. Multimed Man Cardiothorac Surg. 2018