LYMPHADENECTOMY DURING RESECTION OF PULMONARY METASTASES FROM COLO-RECTAL CANCER

Jorge Hernández
Thoracic Surgery Department. HU Sagrat Cor Barcelona

In recent years, the resection of the pulmonary metastases of extrapulmonary primary neoplasms has become an essential part of the activity of the Thoracic Surgery Services, ranking in many cases as the second most frequent cause of lung resection behind, only, of Bronchopulmonary Carcinoma.

The 5-year overall survival rates after metastasectomy vary according to the series and the type of tumor histology, these being better for those of colorectal origin. For this reason, Colorectal Carcinoma is the tumor of origin on which a pulmonary metastasectomy will most often be performed.

At the time of diagnosis, up to 20% of patients present Stage IV, generally due to the presence of liver and / or lung metastases. Despite the existing doubts about locoregional therapies in the management of a systemic disease such as metastatic colorectal carcinoma, most surgeons are in favor of performing metastatic lung resection.

Numerous prognostic factors related to pulmonary metastasectomy have been proposed in patients with metastatic colorectal carcinoma, however, there are no randomized studies that allow us to know them in a more reliable way.

Lymph node involvement as a prognostic factor is one of these controversial areas related to pulmonary metastasectomy. Thoracic surgeons are not convinced whether or not they should perform some type of lymph node resection, dissection or systematic sampling of the lymph nodes during metastasectomy as well as subsequent oncological management, in the event that there is finally a lymph node involvement. Historically, this lymphatic evaluation was not performed routinely and was performed by searching for suspicious nodes selectively based on preoperative images or after a suspicious intraoperative finding. The incidence of mediastinal lymph node metastases in patients with pulmonary metastases from CRC has been reported to be between 8% and 25% and is a known negative prognostic factor for overall survival.

According to the data extracted from the database of the Spanish Group GECMP-CCR-SEPAR, no type of lymphadenectomy was performed in a significant number of patients, and the lymph node status was unknown in 72% of the patients. This percentage increased significantly in the group of patients undergoing videothoracoscopic surgery compared to the thoracotomy group

(93.5% vs 66.9%, respectively). Lymph node involvement was detected in 10% of patients undergoing lymphadenectomy. Disease-specific survival at 5 years, according to lymph node status, was 58.3% without lymph node involvement versus 24.8% when positive involvement was confirmed and 44% for node status lymphatics uncertain. According to our results, lymph node involvement was related to the risk of late death and adequate lymph node resection seems mandatory in all pulmonary metastasectomy.

While the therapeutic effect of lymph node removal is unknown, many agree that lymph node samples should be taken at the time of surgery to more accurately stage patients, help determine overall survival and potentially directing adjuvant treatment. The impact of lymph node involvement on survival has led some to advocate the use of adjuvant chemotherapy in those patients with pathologically proven lymph node metastatic involvement.