



SURGICAL APPROACH IN PATIENTS WITH CN2 OLIGOMETASTATIC NON-SMALL CELL LUNG CANCER (NSCLC)

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According to the EORTC consensus group, the main goal in the treatment of oligometastatic disease is to obtain long-term control using a radical treatment that is technically feasible and has acceptable toxicity [1]. The type of radical treatment is not included in this definition, only the feasibility. The role of thoracic surgery in the oligometastatic setting is still highly controversial [2]. Let us first consider cN2 involvement. In the current, 8th TNM classification, involvement of mediastinal lymph nodes is considered to be locoregionally advanced disease, not metastatic disease [3]. Moreover, in patients with cN2 NSCLC presenting with synchronous oligometastatic NSCLC, proposing a precise diagnostic and therapeutic algorithm remains difficult as treatment of non-oligometastatic cN2 NSCLC on itself represents a highly controversial topic [4]. When both are combined, precise staging of mediastinal lymph nodes is required to determine the extent of mediastinal involvement. Although PET-CT remains the first step in this particular situation, pathological confirmation is necessary [1]. The EORTC consensus group clarifies that pathological confirmation of mediastinal nodes is indicated if it influences treatment strategy, which is certainly the case in this setting. PET/CT-scans are generally used as initial step to detect systemic disease and mediastinal lymph node status, with sensitivity and specificity rates ranging between 79-85% and 87-92%, respectively [5]. To confirm pathological involvement of N2 nodes minimally invasive (EBUS, EUS or combined) or invasive methods (mediastinoscopy) are recommended.

Secondly, regarding the oligometastatic state, the EORTC states that pathological confirmation of at least one metastasis is required, especially in the case of a solitary metastasis or if the results may change the therapeutic strategy.

Regarding the individualized treatment, every patient should be discussed within a multidisciplinary team. First, the N2 status should be addressed. In case of bulky N2, multilevel N2 or extracapsular involvement, surgery is not a valid therapeutic option anymore, as no R0 resection can be obtained.

For limited, single station N2 involvement, immediate surgery may be considered when the thoracic surgeon confirms that a complete R0 resection is likely to be obtained. In case of potentially resectable N2 disease, combined modality therapy is indicated consisting of chemotherapy, radiotherapy and/or surgery. Targeted therapies in case of specific mutations and immunotherapy may be also be added as induction or adjuvant therapeutic modality [6].

Treatment of the oligometastasis depends on the specific location whereby radiotherapy and/or surgery are main treatment options. In general, to treat oligometastatic NSCLC there are two main therapeutic approaches [7]. The first approach involves an initial resection of the primary tumor, followed by control of distant lesions using surgery or radiotherapy, and control of micrometastases by systemic therapy. The second approach involves initial treatment with systemic therapy, followed by adjuvant local treatment with surgery or radiotherapy for those patients who responded to drug therapy, but still have residual, localized tumors. The latter approach is often called the salvage approach [8-9].

Treatment strategies must be based on individual prognostic factors and require a rigorous work-up and a multidisciplinary approach. Hopefully, more data from multi-center prospective trials will determine which therapeutic modalities are most suitable for this heterogeneous population with oligometastatic NSCLC.

References

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