THORACOSCOPIC LOBECTOMY AFTER INDUCTION CHEMOTHERAPY AND IMMUNOTHERAPY

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There are numerous controversies related to the treatment of patients with stage IIIA-N2 disease, including—but not limited to—the following:

- Is there even a role for surgery?
- What is the definition of “Operable N2”?
- Induction therapy: Chemotherapy vs ChemoRT
- Selection of patients for surgery after induction therapy: oncologic criteria
- Role of induction immunotherapy
- Role of thoracoscopic lobectomy
- Role of pneumonectomy

This presentation will focus on induction therapy followed by Thoracoscopic Lobectomy.
NCCN guidelines direct patients with ‘operable N2’ to induction therapy, with or without radiation therapy. There are advocates for non-operative therapy, the balance of evidence suggests that there is a role for surgery in well selected patients. Although the stage IIIA algorithm permits the inclusion of radiotherapy, there is no evidence that it improves outcomes (at least 2 meta-analyses and several phase III trials.)
It is also well known that tumor down-staging is an important prognostic factor for patients treated with induction therapy. While down-staging to N0 is ideal, any degree of down-staging by induction therapy is proof that the therapy is effective, and represents a better prognosis. Tumor/Nodal down-staging should not be used to the exclusion of other clinical factors, but it may be very helpful for patients that might be borderline operative candidates based on age, frailty, pulmonary function, or the need for pneumonectomy.
With the publication of the PACIFIC trial in 2017, it became clear that the use of immune checkpoint inhibitors (ICI) for patients with inoperable stage IIIA and stage IIIB would change the treatment paradigm in operable IIIA as well
Numerous phase II trials have established the safety of ICIs in the induction setting for patients with Stage II-IIIA NSCLC, and there are numerous trials open internationally to test this concept in prospective randomized trials. Without these trials, it is possible that “operable N2” disease will cease to exist, as oncologists migrate to the PACIFIC regimen for these patients as well.
Finally, many centers have demonstrated the safety and efficacy of thoracoscopic lobectomy after induction chemotherapy and ICI. The conclusion of the presentation will demonstrate some strategies of this approach.

References

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