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Respiratory oncology

1. Is there a role for oral tyrosine kinase inhibitors (TKIs; Gefitinib, etc.) in the primary treatment of nonsmall cell lung cancer (NSCLC)? A. Mohan, New Delhi, India

⚠ We need to make a distinction between Caucasian and South-east Asian populations here, because of the major differences in the occurrence of epidermal growth factor receptor (EGFR)-activating mutations between these groups.

For Caucasians, there is no role for oral TKIs in first-line therapy outside a clinical trial. In non-selected populations, a recent study in fact demonstrated inferior survival when patients with advanced NSCLC and performance status 2 were treated with Erlotinib in comparison with Carboplatin-Paclitaxel chemotherapy [1]. In non-controlled studies in patients with EGFR mutations or with clinical characteristics suggesting a high chance of EGFR mutations, high response rates and very promising survival data were observed [2]. Whether this is due to patient selection, or to a real therapeutic benefit, is currently studied in randomised controlled trials comparing standard chemotherapy with EGFR-TKI in these selected patient groups.

2. How can one give symptomatic relief to a patient with NSCLC, stage IIIB/IV, whose tumour is blocking one of the central airways and who refuses stenting in resource-limited settings, or in whom stenting is not possible because of the location of the tumour? S.D. Garde, Mumbai, India

In cases of major blockade of central airways by NSCLC, the most rapid relief is expected from locoregional procedures rather than systemic treatments. Endoscopic debulking by rigid bronchoscopy alone (mechanical) or in conjunction with Yaq laser or cryotherapy are options. External radiotherapy can also be beneficial in patients.

If none of these techniques is possible or available, and in fact in all patients, good supportive care is very important: medicines that help expectoration, give bronchodilation or suppress local infection or inflammation may be used. If these fail, morphine will be needed.

3. Is there a role for steroids (oral or injectable) in cases of lymphangitic carcinomatosis? If so, for how long should they be used, and should antibiotics/antifungals be used? S.D. Garde, Mumbai, India

A Corticosteroids may be effective in the management of dyspnoea associated with carcinomatous lymphangitis [3]. As far as I know, there are no controlled data on the optimal duration, but clinical judgement of benefits versus side-effects should be of help. If long-term use is anticipated, chemoprophylaxis for tuberculosis in high-risk patients, or for *Pneumocystis carinii*, may be appropriate.

4. Is it a hard and fast rule that all small cell carcinomas are centrally placed; what is the likelihood of seeing pulmonary tuberculosis with small cell carcinomas? V. Arya, Meerut, India

⚠ Most of the small cell lung cancers indeed have a central location, although occasionally, a peripheral nodule, accompanied or not by lymph node metastases, turns out to be small cell lung cancer. Because of the immunosuppressive effects of most cancers, pulmonary tuberculosis should be part of the differential diagnosis in the case of suggestive radiological findings, especially in countries with a high prevalence of mycobacterial disease.

5. What is the likelihood that people working at nuclear power stations or sites where nuclear waste is dumped will develop pulmonary carcinomas? V. Arya, Meerut, India

Inhalation of radioactive elements increases the risk of lung cancer. This has been well demonstrated in, for instance, mineworkers exposed to radon gas, which originates from the decay of uranium. If significant exposure to radioactive elements occurs during work in nuclear plants or on dumping sites, then this constitutes a risk of lung cancer. Evidence for the exact effect is, however, difficult to assess, owing to methodological issues and low statistical power in many studies [4].

References

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