

Lung cancer is extremely common (40000 cases per yr in UK) and the vast majority of people present with disease too advanced for surgery. Hence death from lung cancer is also extremely common (35000 cases per yr in UK). In this clinic you will see patients attending for chemotherapy and radiotherapy treatment of their lung tumours, as well as follow-up after treatment.

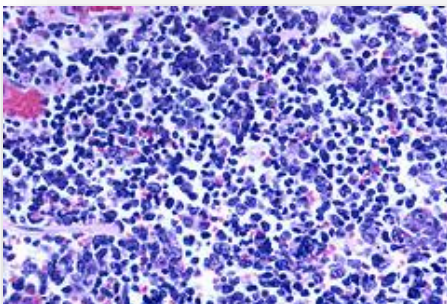
Non-Small Cell Lung Cancer (NSCLC)

This is the commonest lung cancer and includes adenocarcinoma and squamous subtypes. We offer chemotherapy after surgery or together with radical radiotherapy if disease is locally advanced, with the intent of cure. We also offer stereotactic ablative radiotherapy (SABR) to medically inoperable patients with early stage lung cancer. We offer palliative chemotherapy for more advanced or metastatic disease to improve quality of life (QoL) and prolong overall survival by a matter of weeks. In selected cases with a driver mutation (often never smokers) we also offer targeted biological therapies such as gefitinib, a small molecule tyrosine kinase inhibitor of the EGFR receptor (See lecture 3).



Chest radiograph of a patient with non-small cell lung cancer close to the Right hilum

Small Cell Lung Cancer (SCLC)



H&E stain of small cell lung cancer. Note small round eosinophilic cells of neuro-endocrine origin. Do you remember any other tumours which feature small round blue cells?

This accounts for approx. 10-15% lung cancers and is almost always too advanced for surgery. If disease is limited to the thorax, we give concomitant radical chemoradiation and then prophylactic cranial irradiation (as up to 50% may go on to develop brain metastases despite chemo) with curative intent, but still disease often quickly recurs.

If disease is extensive at presentation, all treatment is palliative but with a good chance of initial response.

Mesothelioma

This pleural malignancy is asbestos related and often presents as a unilateral pleural effusion with associated pleural thickening and volume loss and sometimes neuropathic chest wall pain. A few patients have early stage disease and receive chemotherapy in association with debulking surgery. For most patients treatment is limited to palliative chemotherapy and symptom control only. Pemetrexed is a recently introduced chemotherapy agent for patients with advanced disease who are not suitable for surgical resection of their tumour (See lecture 3).



Encasement of the left lung in patient with mesothelioma. What symptoms do you think the patient would report?

In this Clinic

You should expect to learn:

- ❖ Examination of the chest.
- ❖ Appearances of primary tumours, lymph nodes and metastases on CT and PET-CT scans.

From patients you should hear about:

- ❖ History of their presentation.
- ❖ Toxicity of treatment.