Brain metastases in lung cancer

Lung cancer and the CNS

Lung cancer is the most common type of cancer worldwide, with 2.09 million new cases diagnosed every year.1 About 85% of lung cancer cases are non-small cell lung cancer (NSCLC) and 15% are small cell lung cancer (SCLC).2 The brain and other central nervous system (CNS) locations are common sites of progression in lung cancer, particularly in NSCLC.3

~7–10% of NSCLC patients present with brain metastases at the time of initial diagnosis. 20–40% of patients develop brain metastases at some point during their illness4

Brain metastases

Brain metastases, sometimes known as secondary brain tumours, can cause:5

- Headaches
- Impaired vision
- Seizures
- Numbness
- Changes in personality and behaviour
- Reduced mental performance
- Impaired movement

Brain metastases are also associated with a significant reduction in quality of life and life expectancy6

Treatments

- Tumours in the brain are difficult to treat as the blood-brain barrier (BBB) blocks and actively removes some drug molecules from the brain7
- Treatments which are effective in crossing the BBB and remaining in the brain offer new hope for patients

References