Introduction

Lung cancer remains one of the most common cancers in Hong Kong and is associated with a significant number of cancer deaths each year. In 2004, lung cancer was the most common cancer in males and topped the list of cancers causing death in both males and females. Most patients have late-stage disease when diagnosed since symptoms appear late in the course of the disease. Common sites of metastases include the brain, bone, liver, and contralateral lung. Advances in chemotherapy have resulted in patients surviving longer, even with metastatic disease. Intestinal metastases from primary lung carcinoma are rare; there are only anecdotal reports of these in the literature. Nonetheless, the complications of intestinal metastases from lung cancer are associated with high mortality and a poor short-term prognosis and therefore need to be considered in lung cancer patients with unexplained anaemia and bowel symptoms.

Case report

A 59-year-old male presented with a 1-week history of diplopia when looking to the left side. He had smoked one pack of cigarettes a day for the past 12 years but his past health was otherwise unremarkable. He also complained of moderate right-sided flank pain and severe constipation for 10 days. Physical examination revealed a left sixth nerve palsy, multiple enlarged cervical lymph nodes, and a mildly tender right flank. A chest radiograph showed a left hilar mass. A computed tomographic (CT) scan of the neck, thorax, and abdomen showed markedly enlarged lymph nodes bilaterally in the submandibular and internal jugular chains and in the right supraclavicular region with the largest one measuring 5 x 3.5 cm. There were also multiple enlarged lymph nodes in the mediastinal region, a heterogeneously enhancing irregular soft tissue mass measuring 2.9 x 4.2 cm in the left lung hilum, as well as multiple enlarged lymph nodes in the abdomen. Magnetic resonance imaging (MRI) of the brain showed a 0.8-cm hypodense pontine lesion with wall enhancement, which appeared likely to be neoplastic. A core biopsy of the left neck lymph node yielded tumour cells strongly positive for CAM 5.2, synaptophysin and TTF-1, confirming a small-cell neuroendocrine carcinoma. In view of the smoking history and the prominent lung lesion seen on imaging, a diagnosis of metastatic small-cell lung carcinoma was made. Palliative chemotherapy and radiotherapy to the brain were planned.

The patient continued to complain of worsening right-sided abdominal pain and constipation while waiting for chemotherapy. An abdominal radiograph showed slightly dilated small bowel loops. Investigations revealed anaemia and a positive faecal occult blood test so a colonoscopy was performed, revealing a 3-cm ulcerating tumour in the caecum adjacent to the ileocaecal valve (Fig). Examination of tissue biopsied from the lesion showed small-cell neuroendocrine tumour cells. The patient’s symptoms improved with laxatives and analgesics. The colorectal team did not recommend surgery because the tumour might respond to systemic chemotherapy. He was treated with three cycles of etoposide/carboplatin as well as whole brain radiotherapy. Both the pontine and
Discussion

There is only a handful of case reports on metastases to the digestive tract from primary lung carcinoma in the literature. Many of them are reports of patients who presented with an abdominal crisis secondary to the intestinal metastatic lesion and died shortly after presentation. Therefore, although gastro-intestinal metastasis from primary lung carcinoma is rare, it can result in significant morbidity and mortality if present. A Japanese centre reported lung cancer metastases to the digestive tract (excluding the oesophagus) diagnosed either during surgery or autopsy in 30 (1.8%) out of 1635 lung cancer patients over a 17-year period. Large-cell carcinoma metastases were the most common, followed by adenocarcinoma, small cell carcinoma, and squamous cell carcinoma.

References