CASE STUDY

Laryngeal Metastasis From Bile Duct Adenocarcinoma

Metástasis de adenocarcinoma de colédoco en laringe

Patricia Varela-Vázquez, Anselmo Padín-Seara, Ignacio Galed-Placed

Servicio de Otorrinolaringología, Complejo Hospitalario Universitario A Coruña, A Coruña, Spain
Servicio de Anatomía Patológica, Complejo Hospitalario Universitario A Coruña, A Coruña, Spain

Received 13 February 2015; accepted 4 August 2015

Clinical Case

We present the case of a 54-year-old male who attended consultation with a mass in his neck that had been growing gradually over the past 2 months at the level of the thyroid cartilage, associated with recent dysphonia. He had been diagnosed 4 years earlier with an adenocarcinoma of the common bile duct moderately differentiated from intestinal type T3N1M0/EIIB, treated by cephalic duodenopancreatectomy (Whipple’s procedure) and complementary chemotherapy. Fibrolaryngoscopy showed a submucosal tumour in the left hemilarynx significantly reducing the laryngeal lumen. A fine needle aspiration biopsy of the tumour was performed (FNAB) giving a result of adenocarcinoma and the CT scan showed a single lesion destroying the thyroid cartilage (Fig. 1), with no evidence of disease at thoraco-abdominal level. A total laryngectomy was performed and left hemithyroidectomy (Fig. 2). The final anatomopathological analysis revealed a metastasis of adenocarcinoma, positive to CDX2, CK7 and CK20, showing the same immunohistochemical profile as the primary tumour (Fig. 3). Six months later he presented with bony metastases, his general condition had deteriorated and he subsequently died.

Discussion

Metastases in the larynx from distant neoplasms are rare, constituting only 0.09%-0.4% of tumours of the larynx. Skin melanoma and renal melanoma are the most common origin.
of metastasis, followed by the breast, lung, prostate, colon, stomach and ovary. To our knowledge, this is the first case of a metastasis of an adenocarcinoma of the common bile duct in the larynx.

Carcinoma of the bile duct or cholangiocarcinoma, is a rare tumour which usually presents in the advanced stages. It comprises 3% of neoplasms of the gastrointestinal tract. Survival at 5 years from distal cholangiocarcinomas is 23%. For distal cholangiocarcinomas, distant metastases occur late in the course of the disease and are most frequently located in the liver, the lungs and the peritoneum. They are positive to immunohistochemical markers CK7 and CK20.

The low frequency of metastases in the larynx from distant malignancies is attributed to the relatively terminal location of the larynx in lymphatic and vascular circulation. Tumours which tend to present metastasis in bone can metastasise in cartilage, provided the cartilage presents ossification and, therefore, more vascularisation. One hypothesis to explain the vascular spread of a tumour to the larynx would be via the venous system and thence to the left heart, aorta, external carotid artery, superior thyroid artery and superior laryngeal artery. Other authors have proposed the vertebral venous plexus and the lymphatic system as a means for the spread of cancer. In the case we present, a tendency to bony metastasis was observed, with no cervical lymph node involvement, and therefore haematogenous spread might be considered the most likely. The laryngeal metastasis was isolated and therefore, in line with the patient’s wishes, a total laryngectomy was performed. Six months later the patient presented multiple bony metastases and a deterioration in his general condition, resulting in his death.

In general, patients with metastases in the larynx from a distant primary tumour tend to have a poor prognosis because the metastasis usually appears in the end stages of the disease. The prognosis will depend on the biological behaviour of the primary tumour, whether there is disseminated disease, and the general condition of the patient. Therefore treatment should be focussed on the individual case, palliative treatment might be given to improve quality of life, reserving curative treatment for isolated tumours.
Conflict of Interests

The authors have no conflict of interests to declare.

References


