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Case Report

Lung Cancer: A Frequent Tumor With a Rare Synchronous Metastasis

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Lung cancer is one of the most common cancers and a leading cause of cancer associated death.[1] About 50% of all lung cancers have distant metastasis at the diagnosis.[2,3] The gastrointestinal system is rarely involved.[1,4] Symptomatic colonic metastasis is extremely rare, with an estimated incidence of 0.2–0.5%, and usually only clinically identified in advanced stages.[1] Likewise, metastases to the oral cavity are very uncommon, however they can be the first manifestation of a primary tumor.[5]

An 82-year-old woman presented to the emergency department with a 15-day history of diarrhea (no blood or mucus), intermittent abdominal pain and asthenia. No fever associated and no history of cancer or smoking habits. Her medical history included hypertension, dyslipidemia, renal lithiasis and total hysterectomy. She had been followed up in stomatology in the previous month, for the recent appearance of an exophytic lesion in the lower right gingival. On emergency admission, physical examination revealed a palpable, bulky abdominal mass on the left flank and umbilical region. Blood tests revealed anemia (9.1 g/dL), leukocytosis (20.55×10^9/L), neutrophilia (17.3×10^9/L) and high C reactive protein (27 mg/dL). Thoracic and abdominal computed tomography

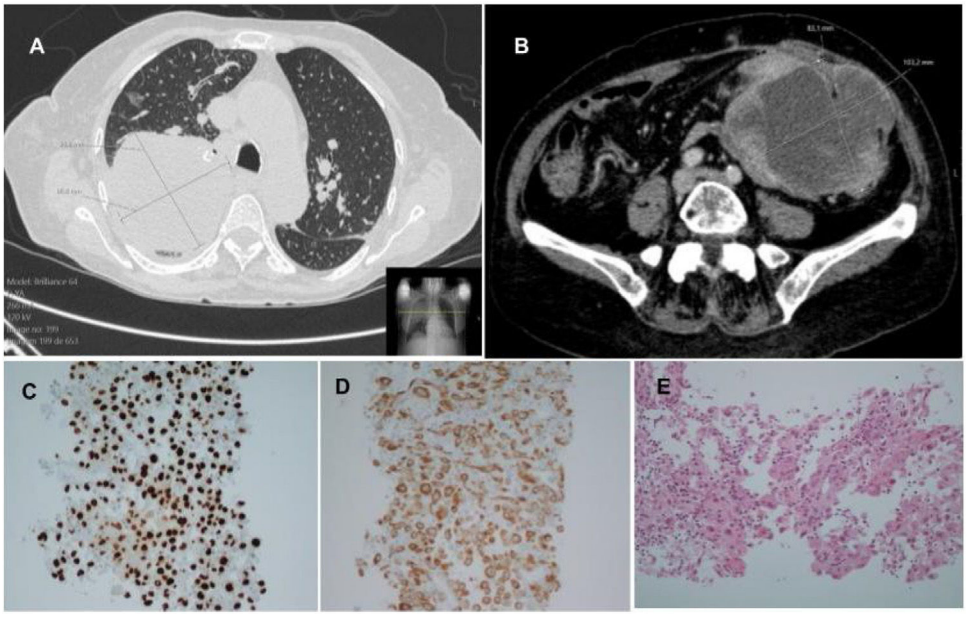

Fig. 1. (A) Thoracic scan showing a pulmonary mass in the right upper lobe, measuring 90 mm × 87 mm. (B) Abdominal and pelvic CT scan showing a mass on the left flank with 103 mm × 83 mm. (C and D) The tumor cells express both TTF-1 and cytokeratin 7, which is compatible with pulmonary origin. (E) H&E staining: poorly differentiated adenocarcinoma.

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scan showed two masses, one in the pulmonary right upper lobe, measuring 90 mm × 87 mm, and the second on the left flank with 103 mm × 83 mm (Fig. 1A and B). Abdominal, lung and gingival lesions histopathology revealed poorly differentiated pulmonary adenocarcinoma. Immunohistochemistry was negative for CDX2, cytokeratin20, GATA-3 and reactive for CK7 and TTF-1 (Fig. 1C–E). These findings support that the metastatic lesions were from a primary lung carcinoma. Unfortunately, the patient died two months after the diagnosis due to an infectious complication.

The case we report is an exceptionally rare presentation of synchronous colonic and gum metastasis of primary lung adenocarcinoma. The exact incidence of lung adenocarcinoma metastases to the colon is unknown because most of them are from squamous and large cell carcinomas.[1] Metastasis in the oral mucosa are also very rare, with a poor prognosis. These metastasis may be the initial manifestation of neoplasia in about a quarter of cases, although they are frequently confused with benign lesions of the oral soft tissues.[5]

This report emphasizes that exophytic gingival lesions of recent appearance, despite patterns of benignity, should be actively examined and a biopsy should be carried out for definitive diagnosis.

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Competing Interests

The authors have no competing interests to declare related to this study.

References

1. Thomas K, Mirza Z, Coppola D, Friedman M. Colonic metastasis from primary lung adenocarcinoma: a case report and review of the literature. AME Med J. 2017;2:12.
2. Sakai H, Egi H, Hinoi T, Tokunaga M, Kawaguchi Y, Shinomura M, et al. Primary lung cancer presenting with metastasis to the colon: a case report. World J Surg Oncol. 2012;10:127.
3. Balla A, Subiela JD, Bollo JS, Martínez C, Luppi CR, Herná Ndez P, et al. Gastrointestinal metastasis from primary lung cancer. Case series and systematic literature review. Cir Esp (Engl Ed). 2018;96:184–97. Available from: www.elsevier.es/cirugia. Accessed 20/11/2022.
4. Huang YM, Hsieh TY, Chen JR, Chien HP, Chang PH, Wang CH, et al. Gastric and colonic metastases from primary lung adenocarcinoma: a case report and review of the literature. Oncol Lett. 2012;4:517–20.
5. Rajini Kanth M, Ravi Prakash A, Raghavendra Reddy Y, Sonia Bai J, Ravindra Babu M, Kanth RM, et al. Metastasis of lung adenocarcinoma to the gingiva: a rare case report. Iran J Med Sci. 2015;40:287–91.