Potential EGFR-Targeted Therapy of a Primary Signet Ring Adenocarcinoma of the Lung in a Pleural Fluid Aspirate: A Case Report and the Significance of Immunocytochemistry

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ABSTRACT

Background: Primary signet ring cell adenocarcinoma (SRCA) of the lung is an extremely rare subtype of lung adenocarcinoma. There is no useful prognostic factors for SRCA. We report a case of SRCA in a pleural fluid aspirate to raise awareness in the management of early SRCA.

METHODS AND MATERIALS: A 58-year-old Nigerian male, non-smoker with a medical history of bilateral pain and dyspnea on exertion. CT scans revealed a soft pleural effusion. CT scans showed a mass in the right upper and lower lobes. Pleural fluid aspirates were taken from the pleural cavity. Samples were processed by cytology and cells stained for immunocytochemistry.

RESULTS: The SRCA case was World Health Organization (WHO) type adenocarcinoma. Positive staining of EGFR overexpression was associated with SRCA and suggests a potential for targeted therapies.

DISCUSSION: The EGFR overexpression is associated with SRCA and suggests a potential for targeted therapies. EGFR overexpression is associated with SRCA. EGFR overexpression is associated with SRCA and suggests a potential candidate for tyrosine kinase inhibitors.

CONCLUSION: We present a case report of an immunocytochemical study of a primary signet ring cell adenocarcinoma in a pleural fluid aspirate.

REFERENCES


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