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Lung Cancer Presenting Complexly with Obstructive Jaundice

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Abstract

Lung cancer is a leading cause of cancer-related deaths worldwide, and its clinical manifestations are often diverse and complex. One such rare but significant manifestation is obstructive jaundice. Obstructive jaundice occurs when there is a blockage in the bile ducts, which hinders the normal flow of bile from the liver to the intestines. This blockage leads to a buildup of bilirubin in the blood, resulting in yellowing of the skin and eyes (jaundice). The intersection of lung cancer and obstructive jaundice presents a challenging diagnostic and therapeutic scenario, requiring a multidisciplinary approach for effective management.

Lung cancer, particularly small cell lung cancer and non-small cell lung cancer, can metastasize to various organs, including the liver. The primary mechanisms by which lung cancer can lead to obstructive jaundice. Lung cancer can metastasize to the liver, causing direct obstruction of the intrahepatic bile ducts. This leads to jaundice as the bile flow is impeded within the liver.

Keywords: Small cell lung cancer • Jaundice • Intrahepatic bile ducts

Introduction

Tumor spread to the extrahepatic bile ducts or the lymph nodes surrounding the bile ducts can cause compression and obstruction. This is often seen with extensive metastatic disease involving the perihilar or peripancreatic lymph nodes. Occasionally, lung cancer can cause paraneoplastic syndromes that affect liver function indirectly, leading to cholestasis and jaundice. Treatments for lung cancer, including chemotherapy and radiation therapy, can sometimes lead to hepatic dysfunction or secondary effects that contribute to jaundice.

Patients with lung cancer presenting with obstructive jaundice often exhibit symptoms that are indicative of both conditions. Yellowing of the skin and sclerae is the hallmark symptom of obstructive jaundice. Resulting from the excretion of conjugated bilirubin in the urine and lack of bile pigments in the stool. Common in advanced malignancies, including lung cancer. Particularly in the right upper quadrant, associated with liver metastasis or biliary obstruction. Persistent cough, hemoptysis, and dyspnea, which are indicative of the primary lung cancer [1].

Literature Review

The diagnosis of obstructive jaundice in the context of lung cancer requires a comprehensive evaluation to determine the exact cause and extent of the biliary obstruction. Elevated bilirubin, alkaline phosphatase, and gamma-glutamyl transferase (GGT) levels suggest cholestasis. Serum Carcino Embryonic Antigen (CEA) and carbohydrate antigen 19-9 (CA 19-9) can be elevated in biliary obstruction and may assist in diagnosis. An initial, non-invasive imaging modality to assess the liver and biliary tree. It helps in detecting bile duct dilation and liver metastases. Provides detailed cross-sectional images of the chest, abdomen, and pelvis, helping to identify the primary lung tumor, metastases, and the level of biliary obstruction. Magnetic Resonance Imaging (MRI) and Magnetic Resonance Cholangiopancreatography (MRCP): Offers detailed imaging of the biliary and pancreatic ducts, helping to identify the exact location and cause of obstruction. Useful in staging and identifying metastatic disease [2].

Endoscopic Retrograde Cholangio Pancreatography (ERCP): Both diagnostic and therapeutic, ERCP can identify the site of obstruction and allow for stent placement to relieve biliary obstruction. Combines endoscopy and ultrasonography to obtain detailed images and biopsies of lesions causing biliary obstruction. If imaging suggests metastatic disease, a biopsy of the liver or lymph nodes can confirm the diagnosis. Management of lung cancer with obstructive jaundice is multifaceted, focusing on relieving biliary obstruction and treating the underlying malignancy. The approach depends on the patient's overall health, the extent of the disease, and the underlying cause of the jaundice. Placement of a biliary stent via ERCP to relieve the obstruction. Plastic or self-expanding metal stents can be used depending on the expected duration of benefit. An alternative to ERCP, particularly when endoscopic access is not possible. In select patients, a surgical bypass of the obstructed bile ducts may be considered [3].

Systemic chemotherapy is the mainstay of treatment for advanced lung cancer. Regimens are tailored based on the cancer subtype (SCLC or NSCLC) and patient factors. For patients with specific genetic mutations (e.g., EGFR, ALK), targeted therapies can be highly effective. Immune checkpoint inhibitors have shown promise in treating advanced lung cancer, particularly in patients with high PD-L1 expression. May be used for local control of metastatic lesions causing biliary obstruction or for palliation of symptoms. Addressing malnutrition and cachexia with dietary modifications and supplements. Effective management of symptoms such as pain, pruritus, and fatigue to improve quality of life.The prognosis for patients with lung cancer presenting with obstructive jaundice is generally poor, reflecting advanced disease with significant metastatic burden. Median survival is often limited, highlighting the importance of palliative care and quality of life considerations [4].

Discussion

Differentiating between jaundice due to metastatic disease, primary biliary pathology, or treatment-related effects can be challenging.Balancing the benefits of aggressive oncologic treatment with the patient's overall prognosis and quality of life. Effective management requires coordination between oncologists, gastroenterologists, surgeons, radiologists, and palliative care specialists. A 65-year-old male with a history of smoking presents with progressive jaundice, weight loss, and a persistent cough. Physical examination reveals jaundice and hepatomegaly [5]. CT Chest and Abdomen: Reveals

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a mass in the right lung, multiple liver lesions, and dilated intrahepatic bile ducts.Confirms obstruction at the level of the common bile duct, stent placed. Liver lesion biopsy confirms metastatic adenocarcinoma consistent with lung primary.Successful stent placement relieves jaundice. Chemotherapy regimen initiated, considering patient's performance status and molecular profile of the tumor. Addressing symptoms and providing nutritional support. The patient experiences symptomatic relief and stabilization of liver function but continues to face challenges related to advanced lung cancer. Multidisciplinary care focuses on optimizing quality of life and managing treatment side effects [6].

Conclusion

Lung cancer presenting with obstructive jaundice is a rare but complex clinical scenario that underscores the need for a nuanced approach to diagnosis and management. The integration of diagnostic imaging, endoscopic interventions, and systemic oncologic treatments is essential for addressing both the biliary obstruction and the underlying malignancy. While the prognosis remains guarded, advancements in therapeutic strategies and supportive care can significantly impact patient outcomes and quality of life. Each case requires individualized assessment and a multidisciplinary effort to navigate the complexities of this challenging presentation.

Acknowledgement

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Conflict of Interest

None.

References

1. Govindan, Ramaswamy, Nathan Page, Daniel Morgensztern and William Read, et al. "Changing epidemiology of small-cell lung cancer in the United States over the last 30 years: analysis of the surveillance, epidemiologic, and end results database." *J Clini Oncol* 24 (2006): 4539-4544.
2. Rivera, M. Patricia, Atul C. Mehta and Momen M. Wahidi. "Establishing the diagnosis of lung cancer: Diagnosis and management of lung cancer: American College of Chest Physicians evidence-based clinical practice guidelines." *Chest* 143 (2013): e142S-e165S.
3. Z'graggen, Kaspar, Carlos Fernández-del Castillo, David W. Rattner and Honorio Sigala, et al. "Metastases to the pancreas and their surgical extirpation." *Arch Surg* 133 (1998): 413-418.
4. Hall, Claire, Louise Clarke, Atanu Pal and Pamela Buchwald, et al. "A review of the role of carcinoembryonic antigen in clinical practice." *Ann Coloproctol* 35 (2019): 294.
5. Liu, Man, Zhigang Zhou, Fenghui Liu and Meng Wang, et al. "CT and CEA-based machine learning model for predicting malignant pulmonary nodules." *Cancer Sci* 113 (2022): 4363-4373.
6. Xu, Jian-Xia, Jin-Bao Hu, Xiao-Yan Yang and Na Feng, et al. "A nomogram diagnostic prediction model of pancreatic metastases of small cell lung carcinoma based on clinical characteristics, radiological features and biomarkers." *Front Oncol* 12 (2023): 1106525.

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