The term mixed adenoneuroendocrine carcinoma (MANEC) was introduced by the WHO in 2010 referring to a neoplasm with dual adenocarcinomatous and neuroendocrine differentiation, each component representing at least 30% of the tumor. MANECs are more commonly diagnosed in the appendix, colon, and stomach. Gall bladder MANECs are particularly rare, and their histogenesis is debated because neuroendocrine cells are rarely identified in the normal biliary tract.

MIXED ADENONEUROENDOCRINE CARCINOMA OF THE GALLBLADDER: A CASE REPORT

Introduction

- The term mixed adenoneuroendocrine carcinoma (MANEC) was introduced by the WHO in 2010 referring to a neoplasm with dual adenocarcinomatous and neuroendocrine differentiation, each component representing at least 30% of the tumor.
- MANECs are more commonly diagnosed in the appendix, colon, and stomach.
- Gall bladder MANECs are particularly rare, and their histogenesis is debated because neuroendocrine cells are rarely identified in the normal biliary tract.

Case Report

- 46 year old female presenting with abdominal pain and weight loss for 6 months.
- Radiological images showed focal gall bladder wall thickening with multiple portal, peripancreatic and paraaortic lymph nodes (Figure 1).
- An EUS-FNAC revealed poorly differentiated adenocarcinoma (Figure 2).
- EUS guided biopsy was reported as suggestive of Neuroendocrine tumour (Figure 3).
- Radical cholecystectomy was performed.

Historyopathology

- MANEC cases can be easily misdiagnosed as cholangiocarcinoma. The acquisition of a surgical specimen and thorough investigations by the pathologist are crucial to make the correct diagnosis in order to determine the best treatment and estimate the prognosis.

Immunohistochemistry

- Synaptophysin - positive
- Chromogranin - positive
- Ki 67 - 70 %

Final Impression

MIXED ADENONEUROENDOCRINE CARCINOMA OF THE GALL BLADDER

Discussion

- MANEC’s are mixed exocrine-endocrine tumours in which each component forms at least 30% of the tumour.
- MANEC’s pose a diagnostic challenge as the neuroendocrine component can have varied morphology, and morphological evaluation and immunohistochemistry is essential for precise diagnosis.
- The prognosis of these tumors will depend on the degree of differentiation of each component.
- The treatment algorithm of MANEC is not well established.
- Surgery may be the mainstay of the treatment and adjunctive therapy with chemotherapy, radiotherapy and somatostatin analogues can be considered according to the NEC type.

Take home message

- MANEC cases can be easily misdiagnosed as cholangiocarcinoma. The acquisition of a surgical specimen and thorough investigations by the pathologist are crucial to make the correct diagnosis in order to determine the best treatment and estimate the prognosis.

References