

## E17

### Isolated IgG4-related cholecystitis mimicking a locally advanced gallbladder cancer: A case report

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**Background :** Patients with IgG4-related disease show multiorgan involvement, including sclerosing sialadenitis, retroperitoneal fibrosis, and mediastinal lymphadenopathy, with abundant lymphatic infiltration containing of IgG4-positive plasma cells and fibrosis. It can be diagnosed with histology, imaging, serology, other organ involvement, and response of steroid therapy. Otherwise, there has been isolated gallbladder involved cases that were difficult to differentiate from gallbladder cancer. In these cases, if it is resectable, the surgery is performed without the serum IgG4 level, and most are diagnosed after surgery. Here, we report clinical course of isolated IgG4-related cholecystitis, along with a review of the literatures.

**Methods :** A 77-year-old man was referred to our hospital with right upper abdominal discomfort for one month. Laboratory data including CEA and CA19-9 were all within normal range. Abdominal computed tomography (CT) revealed a localized gallbladder mass with enhancement of arterial phase and with multiple radio-opaque gallstones. However, there were not any abnormalities in pancreas and other organs on abdominal CT scan. Magnetic resonance cholangiopancreatography (MRCP) revealed diffuse irregular wall thickening of gallbladder with the diffusion restriction. This mass showed FDG uptake (SUVmax 7.9) in positron emission tomography (PET)-CT. Under the impression of resectable gallbladder cancer, radical cholecystectomy with S 4b and S 5 resection was performed.

**Results :** Histologic examination showed no malignant cells but lymphoplasma cell infiltration and periductal sclerosis. On immunohistochemical stain, the number of the IgG4+ plasma cells was counted up to 73/high power field and IgG4/IgG ratio was 30%. As the histological findings were highly suggestive of IgG4-related disease, the patient was diagnosed with IgG4-related cholecystitis. The postoperative course was uneventful, and the patient was discharged 8 days after the surgery without any additional treatment including steroid therapy. At the 8-year follow-up, the patient had no symptoms or signs of the disease.

**Conclusions :** It is difficult to differentiated malignancy with various imaging studies unless findings suggestive of characteristic IgG4 related disorders are found through biopsy or cytology. Although rare disease, isolated IgG4 related cholecystitis is difficult to identify from gallbladder cancer and often diagnosed after surgery. However, caution required because unnecessary surgery can be avoided instead of steroid therapy.

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