中文題目：男性 β-catenin positive 肝細胞腺瘤－一病例報告

英文題目：A man of recurrent β-catenin positive hepatocellular adenoma: A case report

作　　者：顏廷宇[1]，黃詠筠[2]，李沅融[1, 3]

服務單位：[1]高雄榮民總醫院內科部，[2]教學研究部，[3]內科部肝膽胃腸科

Background:

Hepatocellular adenoma is a benign, solid liver tumor develops predominantly in women of childbearing age in association with the use of oral contraceptives. We report a man who is diagnosed as beta-catenin activation hepatocellular adenoma.

Case report:

We are presenting a case of multiple hepatocellular adenomas diagnosed in a 52 years old male. His background was significant for having undergone transoral wide excision of oral SCC, pT1N0M0, stage I, 5 years ago. He was referred to us due to occasionally found some liver hyperechoic nodules by abdominal sonography. His clinical symptoms included poor appetite with body weight loss (2kg/one month), general malaise noted in recent months. Clinical examination of the abdomen did not reveal any palpable mass nor jaundice. Laboratory of liver function tests showed in normal limit, markers for hepatitis C was negative and hepatitis B showed s loss condition. Tumor markers a-fetoprotein was 4.4 ng/ml, SCC 1.6 ng/ml.

Abdominal computed tomography (CT) revealed some hypodense nodule over S5/S8 (Fig. 1). A liver Magnetic Resonance Imaging (MRI) scan confirmed the presence of delayed enhancing liver nodules 1-1.5 cm in size at S5 and S8. Positron Emission Tomography scan disclosed nodules in liver were glucose hypometabolic nodules (Fig. 2). He then underwent liver sono-guided core needle biopsy, and it confirmed the diagnosis of beta-Catenin-activated hepatocellular adenoma (b-HCA) based on diffuse Glutamin synthetase staining and beta-catenin membranous staining (Fig. 3). Sono-guiding transcutaneous ethanol injection (PEI) was done. The following liver MRI scan 3 months after treatment reported no recurrence noted. However, a recurrent nodule was noted over S6 area after 6 months later. We arrange another PEI again and keep closed follow up.

Discussion:

The classification of hepatocellular adenoma can be based on genotype-phenotype. HCAs with mutations in beta-catenin, one of subtypes, is more found in males. Morphologic borderline lesions between adenomas and HCC were mostly found in beta-catenin activation HCA, which associated with increased risk for malignant

transformation [1]. Other higher malignant transformation risk factors include male sex, lesion size >5 cm, heavy lipofuscin pigment, androgen associated adenomas [2]. The risk of bleeding and malignant transformation in patients with multiple HCAs is same as a single HCA, management of multiple HCA should be based upon the size of the largest tumor. Resection or curative treatment is recommended for high risk condition, included all HCA diagnosed in men [3].

Back to our case, though there were multiple tumors in the liver, the largest size wasn't greater then 5cm, considering his male gender and beta-catenin activation, we performed curative treatment- percutaneous ethanol injection for him. Nevertheless, a recurrence nodule was noted after 6 months followed up. The benign tumor is like malignant activity.

HCA is rare to find, and the malignant transformation is more frequent in man. In view of HCA is difficult to discriminate from HCC, due to similar imaging characteristics [4], we recommend diagnostic biopsy or directly curative treatment HCA is diagnosed.

References:

1. Zucman-Rossi J, Jeannot E, Nhieu JT, Scoazec JY, Guettier C, Rebouissou S, Bacq Y, Leteurtre E, Paradis V, Michalak S, Wendum D, Chiche L, Fabre M, Mellottee L, Laurent C, Partensky C, Castaing D, Zafrani ES, Laurent-Puig P, Balabaud C, Bioulac-Sage P Genotype-phenotype correlation in hepatocellular adenoma: new classification and relationship with HCC. Hepatology. 2006;43(3):515.
2. Michael Torbenson, MD Hepatic Adenomas Classification, Controversies, and Consensus. Surgical Pathology 11 (2018) 351–366
3. EASL Clinical Practice Guidelines on the management of benign liver tumours. Journal of Hepatology 2016 Aug;65(2):386-98.
4. Jan H.M.B. Stoot1,2, Robert J.S. Coelen1,2, Mechteld C. de Jong1 & Cornelis H.C. Dejong1,3 Malignant transformation of hepatocellular adenomas into hepatocellular carcinomas: a systematic review including more than 1600 adenoma cases. HPB 2010, 12, 509–522

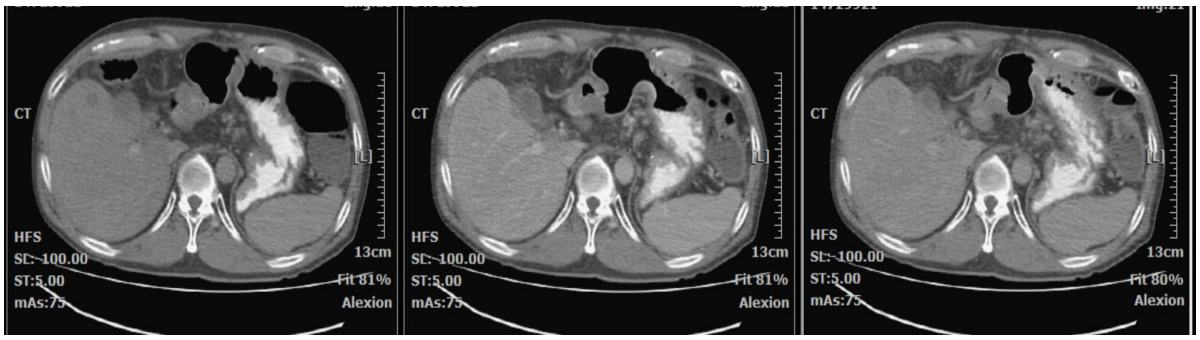

Fig 1. Some hypodense nodules over S5/S8 area were noted

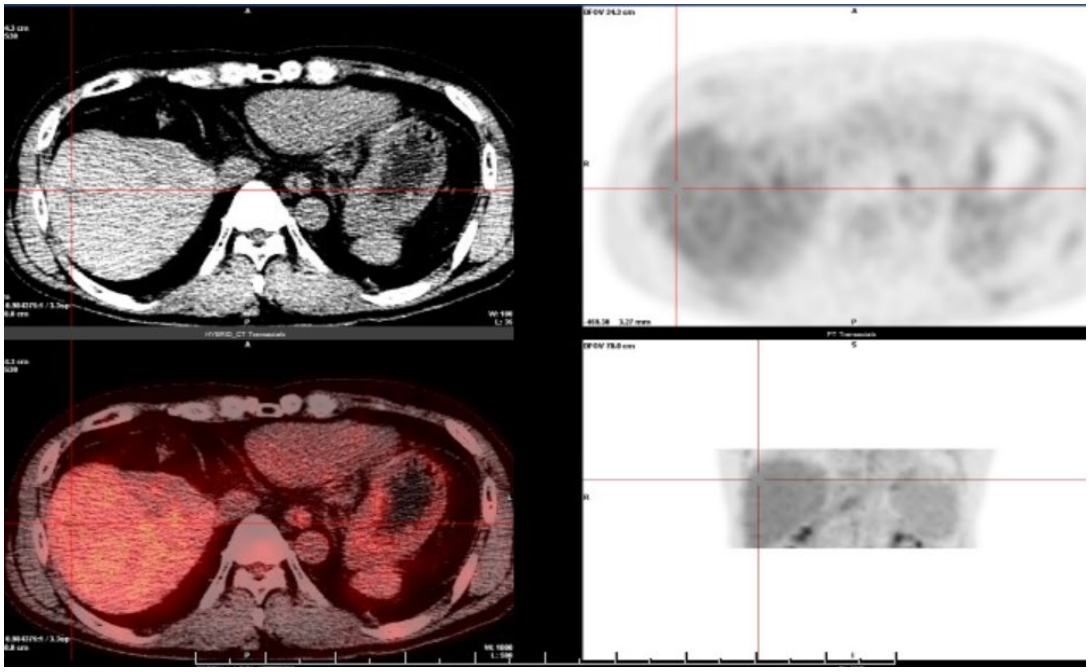

Fig 2. The hypodense nodules over S5/S8 area were hypometabolic condition

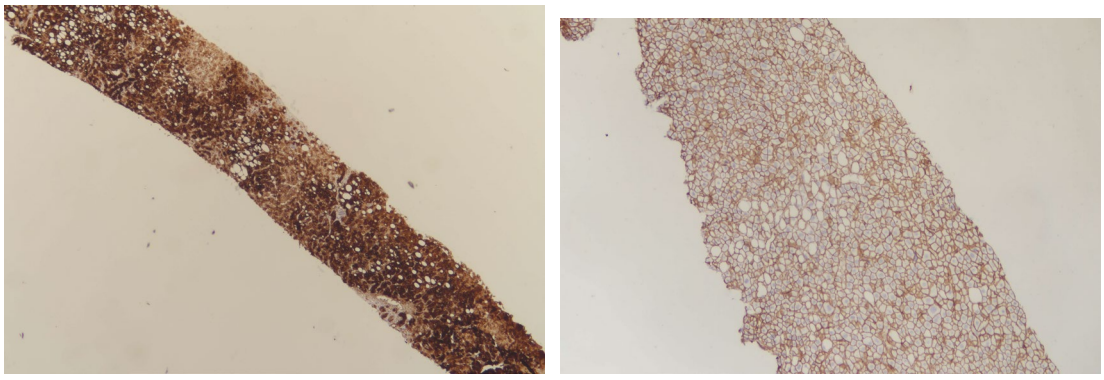

Fig 3. (A) Glutamin synthetase_40X_diffuse staining showed positive (B) Beta-catenin_100X_membranous staining showed positive