

Short Reports

## CLINICAL OBSERVATION OF THE SEGMENTAL TYPE OF ADENOMYOMATOSIS OF THE GALLBLADDER CAUSING GALLBLADDER CARCINOMA

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It is uncommon that clinical reports about adenomyomatosis of the gallbladder causing gallbladder carcinoma, which are considered to be an occasional phenomenon, are few and there is no perfect document discussing the relationship between them all over the world in detail. When analysing the cases of adenomyomatosis of the gallbladder in our hospital we found that it was related to the incidence of gallbladder carcinoma and should secure the attention of clinicians.

### CLINICAL MATERIALS

From 1975 to 1993, 68 patients with adenomyomatosis of the gallbladder were confirmed by operation at Beijing Railway General Hospital, representing 1.7% of the total benign lesion of the gallbladder in the same term, lower than 8.7% which was reported by Oofani.<sup>1</sup> The average age was 57.8 years, male versus female was 1.4:1.

It was classified into three types according to the gross features of the specimens by the naked eye during operation:

1. Segmental Type: 44 cases, 64% of the total. A circular narrow was composed in the middle of the gallbladder and divided it into two small separate interconnected lumen, thus made the gallbladder looked like a gourd.

2. Local Type: 16 cases, representing 24% of 68 patients with adenomyomatosis of the gallbladder, which had the character of a hemispheric elevated lesion with a central dimple located in the bottom of the gallbladder.

3. Diffuse Type: 8 cases, this type had the character of a thickened wall throughout the entire gallbladder and the cavity became narrowly, about 12% of the total in it.

Among 52 patients with gallbladder carcinoma in the same term, 9 patients had also adenomyomatosis of the gallbladder, all older than 50 years. 8 cases of them were segmental type and one was local type. The prevalence of segmental type of adenomyomatosis of the gallbladder caused cancer was 17.8%, which was significantly ( $4.1\% P < 0.05$ ) higher than that of the other two types. The early lesion was all in the inter cavity proximal to the annular stricture. The tissue was grey, fragile and hard, just like decomposed fish. Lately the lesion can develop along the gallbladder wall to the gallbladder duct, common bile duct and hepatic hilus, to cause lymphadenectasis at the hepatic hilus. Epithelium cell can be seen proliferation and the normal mucosa destroyed by microscope. All specimens were adenocarcinoma. There was one case in 1 stage, 2 and 3 stage two cases respectively, and 4 to 5 stage four cases altogether according to classified features of Morn-Nevin.<sup>2</sup>

According to operation, 3 cases had been done hepaticlobectomy, cholangiojejunostomy and lymph-

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adenectomy. 9 patients died within three years after operation except one patient lived long-term.

In the current statistic datum, among 3882 patients with other gallbladder diseases operated in the same term, 43 (1.1%) patients had gallbladder carcinoma, this was consistent with 1%–2% reported by Silk.<sup>3</sup> These specimens often coexists with gallstones, atrophic cholecystitis (porcelain gallbladder), adenomatous polyp.

## DISCUSSION

Adenomyomatosis of the gallbladder that has been called cholecystitis glandular proliferation was reported first by Ross et al. in 1955. The term adenomyomatosis of the gallbladder was used by Jutasl in 1958.<sup>4</sup> The major characteristics of the lesion were of a thickened gallbladder wall, showing Rokitansky-Aschoff distended, composed pseudo-diverticulum by microscope. X-ray film come out spotted dense shadows in the diverticulum, barium meal showing irregular filling defect at bottom of the gallbladder.<sup>5</sup> After fat meal or injecting CCK imaging material removed slowly complicated right upper abdomen colic is another clinical feature of segmental type of adenomyomatosis of the gallbladder. The feature of photomicrograph: there is proliferate spiral structure and fibromuscular tissue in the middle of the gallbladder wall, distended Rokitansky-Aschoff sinuses communicated with the gallbladder cavity and showed chronic regressive inflammation, therefore, it is benign lesion proliferated adenomyomatosis tissue.

The major lesion result in gallbladder carcinoma takes place in the fundal cavity distal to the annular stricture of segmental adenomyomatosis. It is determined by the special position proliferated. We considered that the obstruction is caused by the

annular stricture may leads to excessive intraluminal pressure and cholestasis in the fundal compartment and changes the epithelium of its mucosa in long-term. This changed mucosa may be likely to produce gallbladder carcinoma.<sup>1</sup> In our statistic material, the prevalence of gallbladder carcinoma developed in segmental adenomyomatosis of the gallbladder was 17.8%, this rate was obviously higher than that the patients with other gallbladder diseases (1.1%  $P<0.025$ ). Therefore, we have indicated that the patients with segmental adenomyomatosis of the gallbladder have far higher risk than the patients without this disease, especially in middle and advanced age patients older than 50 years. Due to early symptoms of gallbladder carcinoma are not apparent, its diagnosis is very easy escaped and survival rate is lower than 5%.<sup>3</sup> So we indicated that an early cholecystectomy should be done in the patients with segmental adenomyomatosis of the gallbladder.

## REFERENCES

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