**POSTER #9**

**GALLBLADDER POLYPS IN CHINESE-AMERICANS**

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**BACKGROUND:** Gallbladder polyps greater than 1cm are currently resected via cholecystectomy. The benefit of surgery is unclear because many of these polypoid lesions are benign on final pathology.

Previous studies have identified male sex and hepatitis B as risk factors (Lin et al., 2008). The literature suggests that 6.9-15.8% of Chinese patients will have gallbladder polyps. Of 40 patients in one series, 23 (57.5%) had cholesterol polyps, 5 (12.5%) inflammatory polyps, and 4 (10%) had adenocarcinomas (Zhang, 1991). However, these studies were done in China in the 1990s, and no recent study of the Chinese-American population exists.

**METHODS:** This is a retrospective chart review designed to study the incidence of gallbladder neoplasms in a 3-surgeon practice based in downtown Manhattan. Using our office electronic medical records, we searched for cases with the CPT code for laparoscopic or open cholecystectomy (47562, 47563). We then searched for patients with the ICD-9/ICD-10 code for gallbladder polyp (575.6, K82.1). These cases were entered into an Excel database and the results were analyzed with SPSS statistical software.

**RESULTS:** There were a total of 185 cholecystectomies performed by our practice between 2012-2016. 176 (95%) were laparoscopic cholecystectomies and 9 (5%) were open or lap-converted-to-open cases. Of these, 62 (33.5%) were performed for gallbladder polyps. There was one case (1.6%) of adenocarcinoma and 7 (11.3%) cases of adenoma on final pathology. Combining adenoma and adenocarcinoma, the incidence of neoplasm was 12.9% (8/62). The remainder had cholesterol polyps or chronic cholecystitis.

All the patients were Chinese; 110 (59.7%) were male. The mean age of the cohort was 50.5 years (range 28-75). The average BMI was 23.9; 36 (19.4%) were smokers. The polyp size on ultrasound ranged from 4-26mm, with a mean of 11.6 (SD 3.9). The highest proportion (27.4%) of polyps measured 10mm. 12 (19.4%) patients were hepatitis B positive.

The risk of having adenomatous disease was 28.4% for a female patient (OR 7.0, CI 1.34-36.6, SE 5.92) greater than 50 years old with a >16mm polyp on initial ultrasound. The risk of the same patient having invasive adenocarcinoma was 3.7% (vs amale, 3.9%). Overall, age >61 years, BMI >25 and size of polyp on imaging>16.7mm were predictors of invasive adenocarcinoma.

**CONCLUSION:** The incidence of neoplasm was 12.9% in patients with gallbladder polyps. Age, gender, BMI, polyp size and smoking status were risk factors for neoplasm. These data provide a basis for a risk stratification system to determine whether a patient should undergo cholecystectomy for gallbladder polyps. Further work needs to be done in a larger population.

**CONTENT CATEGORY:** Patient Care

**KEYWORDS:** *Gallbladder neoplasm, Gallbladder polyps, Gallbladder adenoma, Gallbladder adenocarcinoma, Cholecystectomy*