PATHOLOGICAL CORRELATION OF GALLBLADDER DYSKINESIA

Sarang Kashyap, Savni Satoskar, Avian Chang, Vinay Singhal, Easton Hospital-St Luke's University Health Network

- Introduction:

Gallbladder dyskinesia is a common indication for laparoscopic cholecystectomy. It is a diagnosis made in those patients who have pain of biliary origin with normal imaging of the biliary tree and gallbladder. The exact pathological correlation of this phenomenon is unknown. [1] Or study investigates the pathological findings in specimens from laparoscopic cholecystectomy done for the indication of gallbladder dyskinesia.

- Methods and Procedures:

We performed a retrospective chart review of patients who underwent laparoscopic cholecystectomy at Easton Hospital from 2012 to 2018. We studied demographic variables such as age, sex, body mass index (BMI) as well as the diagnosis or indication for which laparoscopic cholecystectomy was performed. Gallbladder ejection fraction was also noted.

- Results:

We found that most gallbladder specimens were normal on pathology. Some showed chronic inflammation and some showed cholesterolosis. When classified by ejection fraction, we found that those with normal gallbladder ejection fraction were normal in 39% of cases. Chronic inflammation was seen in 34.1% of cases. Of gallbladders with low ejection fraction, 39.5% were normal. The most common abnormality was chronic inflammation (41%). Of gallbladders with excessively high ejection fraction, 55.6% normal. Of the rest, they were equally distributed between various pathologies. Thus we see that a large number of patients who have gallbladder dyskinesia, do in retrospect, have some pathology of the gallbladder.

- Conclusion:

Gallbladder dyskinesia is a predominantly functional phenomenon and pathological examination of the resected gallbladder specimens is described in literature as being often normal. [2] However, many of these patients have inflammation seen on pathological examination of the specimen, as seen in our study. Some of these patients have functional improvement with cholecystectomy. The exact correlation between pathology and functional improvement with cholecystectomy is as yet unclear. [3] [4]

- References:

1) C DuCoin, D. Wier et al, "Normokinetic biliary dyskinesia: a novel diagnosis," *Surgical Endoscopy* (2012) 26:3088–3093.

2) R C Wrght, R J Wright et al, "Surgical outcome in patients with biliary colic and atypical workup," *The American Journal of Surgery*, no. 217, pp. 986-989, 2019.

3) S Saurabh, B Green et al, "Is hyperkinetic gallbladder an indication for cholecystectomy?," *Surgical Endoscopy (2019) 33:1613–1617.*

4) K D. Pihl, S Hanses et al "Effects of laparoscopic cholecystectomy in normokinetic biliary dyskinesia," *The American Journal of Surgery.* 2018 Jan;215(1):116-119.