Gallbladder cancer is the most aggressive, and has the worst prognosis among biliary tract cancers. Gallbladder cancer symptoms are usually unspecific leading to a delayed presentation. Over the past few years, interest has taken place in the role of inflammatory markers and their prognostic value in various cancers there is a clear need for additional prognostic tools that can aid in making clinical decisions. In our study, we aim to further study the relationship between the neutrophil to lymphocyte (NLR) and the platelet to lymphocyte ratio (PLR) with gallbladder cancer and their ability to predict patient survival and the metastatic behavior of the tumor.

**Methods**

All patients diagnosed with gallbladder cancer in our institute were included in this study except for patients presented with cholangitis using our hepatobiliary multidisciplinary team registration database. Patients were diagnosed through imaging and biopsy. Patients were staged according to the American Joint Committee on Cancer (AJCC) staging system. The NLR was defined as the absolute neutrophil count in peripheral blood divided by the absolute lymphocyte count and PLR was defined as the platelet count divided by the absolute lymphocyte. Both ratios were calculated at time of diagnosis. An NLR of 5 and PLR of 150 were used as cut-off values.

A total of 37 patients with gallbladder cancer were identified between July 2009 and September 2016 with at least 6 months of follow-up. Ten (27%) patients were females and 27 (73%) were males. The mean age at time of diagnosis with gallbladder cancer was 53.4 ± 13.7 years. The mean follow up period was 1.3 ± 1.3 years. The overall patient survival from time of diagnosis until the last follow-up was 54.1%. NLR and PLR were categorized with a cutoff value of 5 and 200 respectively, and additional variables were included. Predictors of outcome were checked using univariate and multivariate Cox's regression analyses that revealed PLR<200 and surgical resection are associated with better survival. Patients who had metastatic disease showed significantly higher NLR and PLR at time of diagnosis (P=0.008), (P=0.001) respectively.

**Results**

In our study, we studied the effect of NLR>5 and PLR>150 and their value in gallbladder cancer. NLR and PLR can be simple and valuable prognostic markers of gallbladder cancer.

**Conclusions**