Aim: Dietary and many other factors have been shown to increase the risk of gallstones, but their association with stone type is poorly understood. This study aims to assess the association of dietary and obstetric factors with the type of gallstone.

Method: 116 consecutive patients requiring cholecystectomy due to gallstone disease, admitted in our hospital, from January 2019 to December 2020 were included in this study. Demographic details, medical history, lifestyle and dietary habits, obstetric history and laboratory parameters were recorded using a data collection form developed by the researchers. Removed gallstones were classified as being cholesterol or pigment by gross visual inspection.

Results: Cholesterol gallstones were found in 76 (65.5%) and pigment stones in 40 (34.5%) of 116 total patients. Drug use was significantly higher in pigment stone group as compared to cholesterol group (p=0.002). Patients with cholesterol stones consumed significantly higher beef, fish and confectionery items than patients with pigment stones with a p-value of 0.043, 0.017 and 0.041, respectively. Parity was significantly higher in patients with pigment stones as compared to patients with cholesterol stones (p=0.023). A logistic regression model to assess the effect of beef, fish and confectionery item consumption and age at first pregnancy with the likelihood of having cholesterol gallstone was statistically significant (p=0.017) and showed that risk is higher in patients with age ≤ 20 years at first pregnancy [OR 6.89 (95% CI 1.24–38.15), p=0.027].

Conclusions: This study concludes that diet and obstetric factors can influence the type of gallstone.