

Thesis Title The Study of Composition of Gallbladder
 Bile in Patients with Gallstone Diseases.

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ABSTRACT

A total of 92 gallstone and 9 control subjects were studied. The classification of gallstone subjects based on qualitative analysis of gallstones by infrared spectroscopic examination. With this criteria, gallstone subjects can be divided into 30 cholesterol gallstones, 53 black pigment, 8 brown pigment and one mixed stone.

The studies were composed of demographic data, bacterial cultures, microscopic examination and biochemical analysis of gallbladder biles. Females were found more frequently than males in all groups of gallstone patients. Most of females with black and brown pigment gallstones were found to be older than those with cholesterol gallstones. Most of cholesterol gallstone

patients were heavier than those of other groups of gallstone patients. All of bacterial cultures in gallbladder biles of brown pigment were found to be positive. Microscopic examination of gallbladder biles shows that cholesterol crystal were sensitive and specific to identify cholesterol gallstones.

Biochemical analysis of gallbladder biles shows that phosphorous in gallbladder biles of black pigment (calcium phosphate) was statistically higher than control. ($p > 0.05$). Liver β -glucuronidase in gallbladder biles of black pigment (Cabilirubinate and calcium phosphate) and cholesterol gallstone were statistically higher than those of those of control. ($p < 0.01$, $P < 0.05$ and $p < 0.05$ respectively). Cholesterol in gallbladder biles of cholesterol gallstone was statistically higher than those of black (calcium carbonate) and brown pigments ($p < 0.01$). Cholesterol:phospholipid ratio and saturation index in gallbladder biles of cholesterol gallstone were statistically higher than those of black pigment (Cabilirubinate and calcium carbonate) and control ($p < 0.01$). Total protein in gallbladder biles of cholesterol gallstone was statistically higher than those of black pigment (calcium carbonate and calcium phosphate) and control ($p < 0.01$).