Comment on “The correlation of Helicobacter pylori with the development of cholelithiasis and cholecystitis: the results of a prospective clinical study in Saudi Arabia”

Dear Editor,

In their study Guraya et al concluded that the presence of Helicobacter pylori (Hp) in bile might indicate a significant risk for cholelithiasis.

By using Hp serology, our data indicate presence of past and/or current Hp infection (Hp-I) in 63 of 123 (51.2%) patients (women 64, mean age 63 years) with calculi biliary and pancreatic diseases (cholecystitis/cholangitis and pancreatitis, respectively). Moreover, based on histology, the practical gold standard for Hp-I diagnosis, our data indicated Hp presence in gallbladder tissue in 19.33% of Greek cholecystectomy patients (all women).

Although the pathways of Hp penetration into the bile have not been completely elucidated, we considered the possible pathways of Hp migration and colonization in the biliary tract and its involvement in inflammatory biliary diseases; the possibilities of Hp translocation from the duodenum via Oddi’s sphincter and/or its hematogenous spread to the liver and then excretion into the bile were suggested. In this regard, the possible influx of activated monocytes infected with Hp (due to defective autophagy) from the circulation into the gallbladder might lead to gallbladder-related pathologies (“Trojan horse” pathway, also proposed for the Hp-induced brain pathologies).

Hp-I could affect the pathophysiology of gallbladder stone creation and its complication including cholecystitis, cholangitis, pancreatitis and biliary cancer by the following mechanisms: (1) releasing large amounts of proinflammatory and vasoactive substances, such as interleukins (IL-1, -6, and tumour necrosis factor (TNF)-α) involved in a number of inflammatory diseases also including gallbladder disorders; pro-inflammatory IL-1α, L-6 and TNF-α are involved in the pathogenesis of cholelithiasis; (2) producing oxidative stress, also involved in gallbladder disease; free radical reactions in the gallbladder wall and in bile can induce gallstone formation; (3) influencing the apoptotic process, also involved in chronic cholecystitis and gallbladder oncogenesis.

Therefore, Hp eradication might display a positive impact on Hp-related biliary pathologies.

Conflict of Interest
The Authors declare that they have no conflict of interests.

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References


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