

ABSTRACT

The present study has been conducted to report the prevalence of Hepatitis C virus and *Helicobacter pylori* Infections in patients with pulmonary tuberculosis. A total of 132 suspected pulmonary tuberculosis cases were included in this study. Different methods viz, chest X-ray, tuberculosis immunochromatographic method and Zn smear microscopy were evaluated for the presence of pulmonary tuberculosis. Of all three methods, Zn smear microscopy (52.27%) was regarded as the appropriate method for the diagnosis of pulmonary tuberculosis. After the diagnosis of pulmonary tuberculosis subjects, these were then screened for Hepatitis C virus and *H. pylori* infections. Both infections were present among pulmonary tuberculosis patients. *H. pylori* (50.72%) had increased rate ($P<0.0001$) of infection among pulmonary tuberculosis cases when compared with that of non-diseased cases. Hepatitis C virus (17.39%) was also found to be associated ($P=0.01$) with pulmonary tuberculosis when compared with healthy subjects. No significant gender (M=47.82%, F=52.17%) and age-based (Adolescence=17.39, Adults= 59.42%, Old=23.18%) differences were present ($P=0.3$, $P=0.09$), among PTB cases and healthy subjects. However, in comparison to other age groups, adults (59.42%) showed increased rate of three infections. Fever (50.72%), weight loss (86.95%) and raised ESR (100%) were among the most common manifestations of pulmonary tuberculosis. Smoking was associated (40%) with pulmonary tuberculosis and *H. pylori* infections ($P=0.04$). Pulmonary tuberculosis patients suffering from Hepatitis C virus infections had raised levels of liver biochemical profiles and were under-weight (83.33%). Pulmonary tuberculosis, Hepatitis C virus and *H. pylori* infections were also found simultaneously (5.8%) in this study. This study detected a high prevalence of Hepatitis C virus and *H. pylori* infections among pulmonary tuberculosis patients. The screening of pulmonary tuberculosis patients for the two infections might help in the control of further complications before initiating anti-tuberculosis treatment. In addition, this is the first report on the prevalence of HCV and *H. pylori* infections among pulmonary tuberculosis patients in the study area.