



Figure 3: percentage of serum Ferritin in total *H.pylori* infected patients among gender and age groups with different diagnostic used methods.

Discussion

Currently, there are a number of both invasive and non-invasive diagnostic tests available for the diagnosis of *H. pylori* infection; each has its limitation in clinical applications. Urease-based biopsy tests require endoscopy and are not reliable in cases where patients use proton pump inhibitors. Histological examination follows endoscopy and its accuracy is dependent on the stain selected and on the pathologist's skill. Serology is inexpensive but is not reliable in determining the presence of active infection, which is important for clinical interpretation and diagnosis.

The appearance of IgG antibodies to *H. pylori* is delayed following onset of the infection and may not appear for many months⁽⁴³⁾ such that the working definition of an acute *H. pylori* infection has been a positive test for active *H. pylori* infection (e.g., histology, culture, urea breath test (UBT), or stool antigen test) and a negative IgG serology^(44,45), this

finding agrees with the present results as showed in (Table 1), that 10 of the 47 (21%) *H.pylori* positive patients detected by URUT showed seronegative anti-*H.pylori* IgG. Also this results could be explained by Laine et al⁽⁴⁶⁾. noted that sensitivity of all urease-based tests for detection of *H. pylori* is dependent upon the bacterial load in the stomach; Kobayashi et al⁽⁴⁷⁾. used real- time PCR to estimate the total number of *H. pylori* genomes in biopsy samples and compared these with values obtained by UBT and showed a correlation between the results; other authors including Moshkowitz et al⁽⁴⁸⁾. have reported that the intragastric bacterial density can assessed by urease activity. Moreover, the results in (Table 1) showed six individual from the 37 who were positive with E I A test for anti-*H.pylori* IgG antibody, they showed negative results with URUT, this could be explained that the tissue biopsy sample contain a very low bacterial number, this finding agreed