New scopes of *Helicobacter pylori* and extra digestive disorders

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On the basis of present data, while the association between *H. pylori* and other digestive conditions are still under the study, some authors have also investigated an expanding list of the studies on the role of *H. pylori* as a pathogenic determinant of some extra duodenal idiopathic diseases, such as cardiovascular, immunological, skin, liver, biliary tract, and various other disorders. Although it is still unclear how a localized infection may affect areas distant from the site of infection, it is supposed that *H. pylori* gastric infection may cause systemic illnesses through immune-mediated mechanisms. This idea is based on the following: (i) local inflammation can have systemic effects; (ii) *gastric H. pylori* infection is a chronic process that lasts for decades; (iii) persistent infection induces chronic inflammatory and immune responses that can cause lesions that are local or distant from the site of primary infection. In the past 10 years an increasing number of studies concerning the association between *H. pylori* infection and extra digestive conditions have been reported. Most of these studies have documented the *H. pylori* infection by serology and Urease Breath Test (UBT), and rarely by PCR and no one could isolate any *H. pylori* microorganism from samples using culture method. Of course the culture of this fastidious organism is extremely difficult, if not impossible. On the other hand in many cases inflammatory mediators stimulated by *H. pylori* infection could be the pathogenetic mechanism underlying the observed associations. Therefore, the role of genetic predisposition of the infected host, the presence of strain-specific virulence factors such as CagA, VacA and the serum concentration of proinflammatory markers in *H. pylori* infected patients with these diseases needs further evaluation. Here, some of the recent studies were reviewed to find new scopes for the role of *H. pylori* in some kinds of extra digestive diseases.

Biography

Shohreh Farshad is a Clinical and Research Microbiologist. She has more than 12 year experiences in management of Clinical Microbiology laboratories and research in Medical Microbiology. She is an Associate Professor at Clinical Microbiology Research Center affiliated by Shiraz University of Medical Sciences, Iran and is the Director of Molecular Diagnostic of Bacterial Diseases in the same center. She has participated in nosocomial infection prevention committees, interpretation of diagnostic tests, advising the healthcare providers in test selection, monitoring the quality assurance in the laboratory, training the medical laboratory technologists in interpretation of culture, tests and antibiogram results and consulting in monitoring accreditation of the laboratory and laboratory staff and analyzing the cost of new laboratory tests. She has over 60 publications in peer reviewed journals and has delivered over 70 presentations both nationally and internationally.

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