The Prevalence and Risk Factors of opportunistic intestinal parasites, Helicobacter pylori and co-infection among HIV patients

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Background and objective: Parasitic infections and Helicobacter pylori (H.pylori) constitute a main public health problem in immunocompromised populations, especially in HIV patients. Each of them infects the gastrointestinal tract with similar clinical symptoms. This study was performed to determine the prevalence of H. pylori and its association with opportunistic parasites in HIV patients, moreover to estimate risk and predictive factors for co-infection.

Methodology: Single fecal samples were collected from 70 HIV patients in Khartoum State, Sudan, with age ranging from 13years to 60 years. All stool samples were microscopically examined using Iodine and acid-fast stain to detect ova, cyst and coccidian. Copro-DNAs detection of H. pylori and Cryptosporidium were performed using nested-PCR assays.

Results:H.pylori was detected in 21.4% of HIV individuals molecularly; also opportunistic and intestinal parasites were detected in 74.3%, with the predominance of Cryptosporidium, E. histolyticaand G.duodinalis (28.5%, 27.1%, and 22.8% respectively). 36.5% had co-infection with H. pylori colonized patients and associated with Cryptosporidium spp. and G. intestinalis. Abdominal pain and diarrhea showed significant association with co-infection of Cryptosporidium, Isospora, other parasites and H.pylori.

Conclusion: Our findings provide a good understanding of H. pylori infection epidemiology in HIV patients when associated with opportunistic and intestinal parasites. H. pylori co-occurrence with Cryptosporidium may support the hypothesis of co-infection. Whether H. pylori provide suitable conditions for opportunistic and intestinal parasites or vice versa, further investigations are still needed to confirm the correlation of gut microbiomes.

Biography

AsmaaIbrahim has completed herMSc at the age of 29 years fromGenetic engineering and Biotechnology research institute, University of Sadat City (GEBRI, USC), Egypt.Shehas one puplication and number of submitted articles which have been preceded.

Recent Publication:

1. Emmanuel Ameyaw, Serwah B Asafo-Agyei, SumithiraThavapalan, Angela C Middlehurst, Graham D Ogle (2017) Clinical profile of diabetes at diagnosis among children and adolescents at an endocrine clinic in Ghana. World J Diabetes 2017; 8(9): 429-435. DOI: 10.4239/wjd.v8.i9.429

2. Ameyaw E, Asafo-Agyei SB, Rhule GP (2017) Spectrum of Diseases seen on Neonatal Ward at KomfoAnokye Teaching Hospital, Kumasi, Ghana. Pediatric Infect Dis. 2017; 2 (3):1-4.

3. Asafo-Agyei S, B, Ameyaw E, Chanoine J, -P, Zacharin M, Nguah S, B, Jarrett O, O (2017)Anogenital Distance in Term Newborns in Kumasi, Ghana. Horm Res Paediatr. 396-400. doi: 10.1159/000479689

4. Rowlands A, Ameyaw E, Rutagarama F Joel D et al (2018) Insights from the WHO and National Lists of Essential Medicines: Focus on Pediatric Diabetes Care in Africa. Horm Res Paediatr, DOI: 10.1159/000490467

5. Ameyaw E, Asafo-Agyei SB, Hughes IA, Zacharin M, Chanoine JP (2019)Incidence of disorders of sexual development in neonates in Ghana: prospective study. Arch Dis Child. 104(7):636-638. doi: 10.1136/archdischild-2019-316986

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