

current reports suggest incidences of human infections are declining due to technological advances in animal industry, infection still occurs in specific environments. Additionally, it may be underdiagnosed due to its resemblance to other infections and problems encountered in isolation and identification. The natural resistance of *E rhusiopathiae* to glycopeptides underlines the importance of a prompt microbiological diagnosis of such an uncommon human infection, especially when presented in an unusual clinical presentation. Clinicians and microbiologists working with exposed population should be aware of this microbe and its manifestations.

Histologic Characterization of Histoplasmosis

Ryan Demkowicz, MD¹, Gary Procop, MD, FASCP¹;
¹Cleveland Clinic

Introduction: Histoplasmosis is often found incidentally in surgical specimens, but there are no clear reporting guidelines to describe the subtle differences in the stages of organization of the granuloma. This study establishes grading criteria to more clearly communicate the stage of organization and resolution of these lesions, with the hope that this information could inform clinical decisions.

Methods: For an 11-year period, all surgical pathology cases with histoplasmosis in the final diagnosis with slides available were included in the study. After confirmation that *Histoplasma* yeasts were present, the granulomas were graded as follows: grade 1, active granulomas with or without necrosis with minimal to no fibrous rim formation; grade 2, minimal to moderate granulomatous inflammation remained associated with a well-developed fibrous rim; and grade 3, no granulomatous inflammation remained, and a well-developed fibrous rim was present. Calcification and necrosis were also noted. *Histoplasma* yeasts was semiquantified. One to five yeasts were characterized as rare, 6 to 10 as few, 11 to 50 as moderate, and >50 yeasts as many.

Results: Forty-two cases were included in the study. The lesions were graded as follows: 3 grade 1, 19 grade 2, and 20 grade 3 lesions. Calcifications increased with grade (grade 1: 0 [0%], grade 2: 10 [52.6%], grade 3: 18 [95%]). All histoplasmosis had necrosis. The number of yeasts detected, stratified by grade, was as follows: grade 1, rare (1) and many (2); grade 2, rare (6), few (1), moderate (1), and many (11); and grade 3, rare (2), moderate (4), and many (14). None of the patients developed active histoplasmosis for the duration of their follow-up at our institution.

Conclusion: The proposed grading of histoplasmosis provides an indication to clinicians of the stage of activity or resolution of an excised histoplasmosis. These data do not support the use of antifungal therapy in patients with grade 2 or 3 histoplasmosis.

Incidence of Enteropathogenic *Escherichia coli* among Infants at Eleyele Comprehensive Health Centre, Ile-Ife, Osun State

Kayode Faseyi¹, Jaiyeola Onifade, MLS²; ¹Tofemedics Diagnostic Centre ²ASCP

Objectives: This work was carried out to find the incidence of enteropathogenic *Escherichia coli* in children below 5 years of age who complained of having diarrhea at Eleyele Comprehensive Health Centre, Obafemi Awolowo University Teaching Hospital Complex, Ile-Ife. The work was also done to determine the incidence in different age groups of both sexes.

Methods: All specimens were cultured as routinely done at the bacteriology laboratory in Obafemi Awolowo University Teaching Hospital for stool samples. Colonies of lactose fermenters were processed after overnight incubation at 37°C. Nonlactose fermenter colonies were discarded. Out of 200 colonies isolates on MacConkey agar, there were 150 lactose fermenters and these were all processed. The other 70, which were Gram-positive cocci, were discarded. These were subjected to biochemical examination such as treating them with sugars, for the production of acid and gas, indole production, motility with sugars, citrate utilization, Voges-Proskauer, and methyl red tests.

Results: Out of 150 strains examined, only 80 strains obeyed IMVic ++ -- reactions. These were serotyped to know the enteropathogenic strains. From the result obtained, 23 strains reacted positively with polyvalent antisera (polyvalent 2, 3, 4 antisera), of which 13 strains gave a positive reaction with corresponding monovalent antisera. There were five strains from polyvalent 2 antisera, five strains from polyvalent 3 antisera, and three strains from polyvalent 4 antisera. In close study of this work, total percentage of females with diarrhea was 44.5% while total percentage of males with diarrhea was 55.5%. Out of these 80, *E coli* was isolated, and from these, 13 enteropathogenic *E* strains were isolated (16.25%). Patient aged below 2 years gave nine strains (69.2%), aged 2 to 3 years gave two strains (15.4%), aged 3 to 4 years gave one strain (7.7%), and aged 4 to 5 years gave one strain (7.7%). Also, close examination of result revealed that male children had the greater percentage of enteropathogenic infection, with 8 strains out of the 13 strains serotyped (61.5%) and female children with 5 strains (38.5%).

Conclusion: *E coli* remains an important cause of infant diarrhea. Although epidemics of infant diarrhea caused by enteropathogenic *E coli* have almost disappeared from the developed countries, it is still very common in developing countries. The relative importance of enteropathogenic *E coli* as a cause of infant diarrhea needs to be reassessed and new diagnostic techniques will also help to simplify this task.

First and Only FDA Cleared Digital Cytology System

Genius™ Cervical AI

Genius™ Review Station

Genius™ Digital Imager



Empower Your Genius With Ours

Make a Greater Impact on Cervical Cancer
with the Advanced Technology of the
Genius™ Digital Diagnostics System



Click or Scan
to discover more

ADS-04159-001 Rev 001 © 2024 Hologic, Inc. All rights reserved. Hologic, Genius, and associated logos are trademarks and/or registered trademarks of Hologic, Inc. and/or its subsidiaries in the United States and/or other countries. This information is intended for medical professionals in the U.S. and other markets and is not intended as a product solicitation or promotion where such activities are prohibited. Because Hologic materials are distributed through websites, podcasts and tradeshows, it is not always possible to control where such materials appear. For specific information on what products are available for sale in a particular country, please contact your Hologic representative or write to diagnostic.solutions@hologic.com.

genius™
DIGITAL DIAGNOSTICS