



TOPA Update: July 2016
Molecular Testing: Recent Practice Guidelines

Two recently published practice guidelines recommend the use of molecular testing. The recommendations are summarized below.

American College of Gastroenterology (ACG) Clinical Guideline: Diagnosis, Treatment, and Prevention of Acute Diarrheal Infections in Adults (Am J Gastroenterol 2016; 111: 602-622)

This guideline recommends a new approach to the diagnostic evaluation of infectious diarrhea, with more frequent use of diagnostic testing and an emphasis on molecular methods (referred to in this guideline as “culture-independent methods of diagnosis”). “Historical guidelines for diagnostic testing seem to be too restrictive in the current environment of new diagnostic methods and enhanced ability to target therapy.” Multiplex molecular tests are more comprehensive than conventional tests, with a higher diagnostic yield and improved turnaround time. The relevant recommendations are as follows:

“Recommendation #2: Stool diagnostic studies may be used if available in cases of dysentery, moderate-to-severe disease, and symptoms lasting > 7 days to clarify the etiology of the patient’s illness and enable specific directed therapy.

Recommendation #3: Traditional methods of diagnosis (bacterial culture, microscopy with and without special stains and immunofluorescence, and antigen testing) fail to reveal the etiology of the majority of cases of acute diarrheal infection. If available, the use of **FDA-approved culture-independent methods of diagnosis can be recommended** at least as an adjunct to traditional methods.”

The guideline also recommends the use of culture and molecular methods for epidemiologic purposes.

“Recommendation #1: Diagnostic evaluation using stool culture and culture-independent methods if available should be used in situations where the individual patient is at risk of spreading disease to others, and during known or suspected outbreaks.”

These situations include: workers who handle food, health-care workers, daycare workers, and residents of institutional facilities.

Implementing an Antibiotic Stewardship Program: Guidelines by the Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America (CID 2016; 62: 1197-1202)

Although this guideline is focused on antibiotic stewardship, it includes one recommendation regarding molecular testing:

“Recommendation XVI: We suggest the use of rapid viral testing for respiratory pathogens to reduce the use of inappropriate antibiotics.”

For information on Molecular Testing options, call TOPA Diagnostics and ask for Client Service or Edward Blackman MD (805-373-8582).