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Subject:	GASTROINTESTINAL SPECIMENS FOR CULTURE AND PARASITOLOGY EXAMINATION				
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GASTROINTESTINAL SPECIMENS FOR CULTURE OF ATYPICAL ORGANISMS AND PARASITOLOGY EXAMINIATION

Fecal Specimens

Fecal specimens are examined by request for *Aeromonas, Bacillus cereus, Plesiomonas*, *Vibrio,* and *Yersinia*. The most common bacterial cause of gastroenteritis is by *Salmonella, Shigella, Campylobacter* and *Escherichia coli* O157. Testing for those pathogens is performed in Molecular by PCR (Stool Pathogen Panel by PCR).

General Considerations for Culture of Ayptical Organisms and Parasites

- Only one specimen collection per day for culture is accepted.
- Collect all fecal specimens prior to antibiotic administration or antidiarrheal agents. Keep stool specimen cool; do not incubate or refrigerate. The specimen should be transported to the laboratory as soon as possible or placed in transport preservative.
- Culture is not recommended for patients that have been hospitalized for more than 3 days unless patient had diarrhea upon admission. If diarrhea develops after admission *C. difficile* testing may be recommended in these cases. (Performed in Molecular)
- Do not use toilet paper to collect stool. Toilet paper may be impregnated with barium salts, which are inhibitory for some fecal pathogens.
- A series of three fecal specimens collected every other day is recommended for ova & parasite examination.
- For pinworm use clear scotch tape pinworm collection paddle device or feces collected in morning before bath or defecation.
- Have patient stool specimen collected by one of the following methods.
  1. Pass stool directly into a sterile, wide-mouth leakproof container with a tight fitting lid.

2. Pass stool into a clean, dry bedpan and transfer stool into a sterile leakproof container with a tight fitting lid or to culture transport preservative or O&P transport preservative.
3. If parasite examination is requested, avoid use of mineral oil, bismuth, and/or barium prior to collection since all of these may interfere with detection or identification of intestinal parasites. The specimen should not be contaminated with water or urine because water may contain free-living organisms that can be mistaken for human parasites and urine may destroy motile organisms.
   (a) Routine requests for O&P will have immunoassay for Giardia and Cryptosporidium performed.
   (b) Comprehensive O&P available by contacting Microbiology if (1) a parasite other than Giardia or Cryptosporidium is suspected (2) patient has history of travel to endemic area (3) patient is immunodeficient (4) persistent symptoms that suggest intestinal parasitism. Ova & Parasite Comprehensive exam is a sendout test.

Rectal swabs

1. Swab for routine pathogens are not recommended except for infants.
2. Swabs are primarily for the detection of *Neisseria gonorrhoeae,* HSV, carriers of VRE for infection control, group B strep in pregnant women and detecting *Streptococcus pyogenes (*group A strep.)
3. Pass the tip of a sterile swab approximately 1 in. beyond the anal sphincter (remain in for at least one minute). Carefully rotate the swab to sample the anal crypts, and withdraw the swab. Send the swab in a swab transport system.

References:

- Versalovic,James (Editor in Chief), editors Karen C, Carroll, Guido Funke, James H. Jorgenson, Marie Louise Landry, David W. Warnock, 2011. 10th Edition. Manual of Clinical Microbiology, American Society for Microbiology, Washington, D.C.
- Garcia, Lynne S.(Editor in chief), 2010. Third Edition Microbiology Procedure Handbook. American Society for Microbiology, Washington, D.C.