



Patient: **SAMPLE**
REPORT

DOB: March 29, 1979
Sex: F

Order Number: 93201234

Completed: September 26, 2007
Received: September 20, 2007
Collected: September 17, 2007
Route Number: A071234

Genova Diagnostics Europe

Parkgate House
356 West Barnes Lane
New Malden, Surrey. KT3 6NB

Microbiology

Bacteriology

Beneficial Bacteria

Lactobacillus species		(3+)
Escherichia coli		(4+)
Bifidobacterium		(3+)

Additional Bacteria

gamma haemolytic Streptococcus	NP	(4+)
alpha haemolytic Streptococcus	NP	(3+)
Haemolytic Escherichia coli	NP	(4+)
Serratia marcescens	PP	(4+)
Klebsiella pneumoniae	NP	(3+)

Mycology

Candida albicans	NP	(1+)
Candida parapsilosis	NP	(1+)

Additional Tests (if ordered)

	Inside	Outside	Reference Range
Campylobacter specific antigen	Negative		Negative
Enterohemorrhagic Escherichia coli Shiga-like Toxin	Negative		Negative

Human microflora is influenced by environmental factors and the competitive ecosystem of the organisms in the GI tract. Pathological significance should be based upon clinical symptoms and reproducibility of bacterial recovery.

Microbiology Legend

*NG	NP	PP	P
No Growth	Non-Pathogen	Potential Pathogen	Pathogen

Commentary

Lab Comments

SENSI'S: All yeast, add'l bacteria

Please note that Genova Diagnostics recently upgraded the automated bacterial identification and susceptibility system to the Vitek 2 system to provide faster and definitive identification of bacteria. As a result the following minor changes to antibiotic sensitivities reported for specific bacteria will be effective July 2007:

- *Staphylococcus aureus* susceptibility reports will no longer include Erythromycin.
- *Streptococcus agalactiae* susceptibility reports will no longer report Cefazolin (an I.V./I.M. antibiotic),

Commentary

Nitrofurantoin (not a drug of choice for the sites tested), or Erythromycin.

Commentary is provided to the practitioner for educational purposes, and should not be interpreted as diagnostic or treatment recommendations. Diagnosis and treatment decisions are the responsibility of the practitioner.

Human microflora is influenced by environmental factors and the competitive ecosystem of the organisms in the GI tract. Pathological significance should be based upon clinical symptoms and reproducibility of bacterial recovery.

Sufficient amounts of Lactobacilli and E. coli appear to be present in the stool. Ample amounts of E. coli have been associated with a balanced gut flora. The "friendly bacteria", Lactobacilli and Bifidobacteria, are important for gastrointestinal function, as they are involved in vitamin synthesis, natural antibiotic production, immune defense, digestion, detoxification of pro-carcinogens and a host of other activities. Supplementation with Lactobacilli might be considered in selected cases where the organisms are in the low range of normal. Bifidobacteria is below optimal levels. Ideally, levels of Lactobacillus and E. coli should be 2+ or greater. Bifidobacteria being a predominate anaerobe should be recovered at levels of 4+.

A 1+ quantity of yeast is considered an acceptable amount of yeast in the stool. It may, however, reflect a condition of yeast overgrowth, especially when moderate or many yeast are reported on the microscopic (parasitology) exam, or may lead to symptoms in individuals showing deficient beneficial bacteria.

Bacterial Sensitivity

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Prescriptive Agents			
SERRATIA MARCESCENS			
	S	I	R
Amox./Clavulanic Acid	<input type="text"/>	<input type="text"/>	<input type="text" value="R"/>
Ampicillin	<input type="text"/>	<input type="text"/>	<input type="text" value="R"/>
Cephalothin	<input type="text"/>	<input type="text"/>	<input type="text" value="R"/>
Ciprofloxacin	<input type="text" value="S"/>	<input type="text"/>	<input type="text"/>
Tetracycline	<input type="text" value="S"/>	<input type="text"/>	<input type="text"/>
Trimethoprim/Sulfa	<input type="text" value="S"/>	<input type="text"/>	<input type="text"/>

S Indicates susceptibility to prescriptive agents
I Indicates intermediate susceptibility to prescriptive agents
R Indicates resistance to prescriptive agents

Natural Agents		
SERRATIA MARCESCENS		
	Low Inhibition	High Inhibition
Berberine	<input type="text"/>	<input type="text"/>
Oregano	<input type="text"/>	<input type="text"/>
Plant Tannins	<input type="text"/>	<input type="text"/>
Uva-Ursi	<input type="text"/>	<input type="text"/>

Prescriptive Agents:

Microbial testing has been performed in vitro to determine antibiotic sensitivity and resistance at standard dosages. Prudent use of antimicrobials requires knowledge of appropriate blood or tissue levels of those agents. Antibiotics that appear in the "S" (susceptible) column are more effective at inhibiting the growth of this organism. Antibiotics that appear in the "I" (intermediate) column are partially effective at inhibiting the growth of this organism. Antibiotics that appear in the "R" (resistant) column allow continued growth of the organism in vitro and are usually less effective clinically. Inappropriate use of antibacterials often results in the emergence of resistance.

Natural Agents:

In this assay, "inhibition" is defined as the reduction level on organism growth as a direct result of inhibition by a natural substance. The level of inhibition is an indicator of how effective the natural substance was at limiting the growth of an organism in an in vitro environment. High inhibition indicates a greater ability by the natural substance to limit growth, while Low Inhibition a lesser ability to limit growth. These natural products should be considered investigational in nature and not be viewed as standard clinical treatment substances.

Susceptibility to tetracycline is predictive for susceptibility to minocycline, however in vitro resistance to tetracycline may or may not accurately predict resistance to minocycline. Call the Medical Director if consultation is required.

This test has been developed and its performance characteristics determined by Genova Diagnostics, Inc. It has not been cleared or approved by the U.S. Food and Drug Administration.

Bacterial Sensitivity

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Prescriptive Agents			
KLEBSIELLA PNEUMONIAE			
	S	I	R
Amox./Clavulanic Acid	<input type="text" value="S"/>	<input type="text"/>	<input type="text"/>
Ampicillin	<input type="text"/>	<input type="text"/>	<input type="text" value="R"/>
Cephalothin	<input type="text" value="S"/>	<input type="text"/>	<input type="text"/>
Ciprofloxacin	<input type="text" value="S"/>	<input type="text"/>	<input type="text"/>
Tetracycline	<input type="text" value="S"/>	<input type="text"/>	<input type="text"/>
Trimethoprim/Sulfa	<input type="text" value="S"/>	<input type="text"/>	<input type="text"/>





S Indicates susceptibility to prescriptive agents
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R Indicates resistance to prescriptive agents

Prescriptive Agents:

Microbial testing has been performed in vitro to determine antibiotic sensitivity and resistance at standard dosages. Prudent use of antimicrobials requires knowledge of appropriate blood or tissue levels of those agents. Antibiotics that appear in the "S" (susceptible) column are more effective at inhibiting the growth of this organism. Antibiotics that appear in the "I" (intermediate) column are partially effective at inhibiting the growth of this organism. Antibiotics that appear in the "R" (resistant) column allow continued growth of the organism in vitro and are usually less effective clinically. Inappropriate use of antibacterials often results in the emergence of resistance.

Natural Agents:

In this assay, "inhibition" is defined as the reduction level on organism growth as a direct result of inhibition by a natural substance. The level of inhibition is an indicator of how effective the natural substance was at limiting the growth of an organism in an in vitro environment. High inhibition indicates a greater ability by the natural substance to limit growth, while Low Inhibition a lesser ability to limit growth. These natural products should be considered investigational in nature and not be viewed as standard clinical treatment substances.

Natural Agents	
KLEBSIELLA PNEUMONIAE	
	Low Inhibition High Inhibition
Berberine	
Oregano	
Plant Tannins	
Uva-Ursi	

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Yeast Sensitivity

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Azole Antifungals			
CANDIDA ALBICANS			
	S	I	R
Fluconazole	<=0.125		
Itraconazole	=0.125		
Ketoconazole	=0.125		

S Indicates susceptibility to prescriptive agents
I Indicates intermediate susceptibility to prescriptive agents
R Indicates resistance to prescriptive agents







Azole Antifungals:

Microbial testing has been performed in vitro to determine antifungal sensitivity and resistance at standard dosages. Prudent use of antimicrobials requires knowledge of appropriate blood or tissue levels of those agents. Antifungals that appear in the "S" (susceptible) column are more effective at inhibiting the growth of this organism. Antifungals that appear in the "I" (intermediate) column are partially effective at inhibiting the growth of this organism. Antifungals that appear in the "R" (resistant) column allow continued growth of the organism in vitro and are usually less effective clinically. Inappropriate use of antifungals often results in the emergence of resistance.

Non-absorbed Antifungals	
CANDIDA ALBICANS	
	Low Inhibition High Inhibition
Nystatin	

Nystatin and Natural Antifungals:

In this assay, "inhibition" is defined as the reduction level on organism growth as a direct result of inhibition by a natural substance. The level of inhibition is an indicator of how effective the natural substance was at limiting the growth of an organism in an in vitro environment. High Inhibition indicates a greater ability by the natural substance to limit growth, while Low Inhibition a lesser ability to limit growth. In accordance with laboratory guidelines for reporting sensitivities, results for Nystatin are now being reported with natural antifungals in this category.

Natural Antifungals	
CANDIDA ALBICANS	
	Low Inhibition High Inhibition
Berberine	
Caprylic Acid	
Garlic	
Undecylenic Acid	
Plant tannins	
Uva-Ursi	

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Yeast Sensitivity

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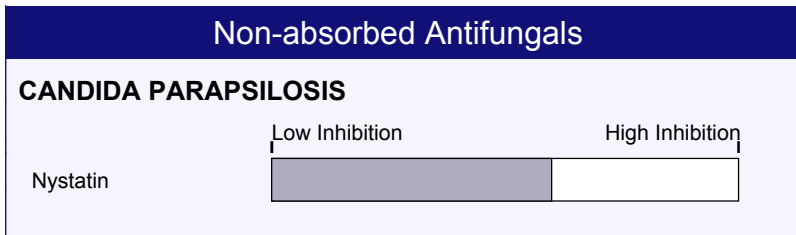
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Azole Antifungals			
CANDIDA PARAPSILOSIS			
	S	I	R
Fluconazole	=1.0		
Itraconazole		=0.5	
Ketoconazole	=0.25		

S Indicates susceptibility to prescriptive agents
I Indicates intermediate susceptibility to prescriptive agents
R Indicates resistance to prescriptive agents

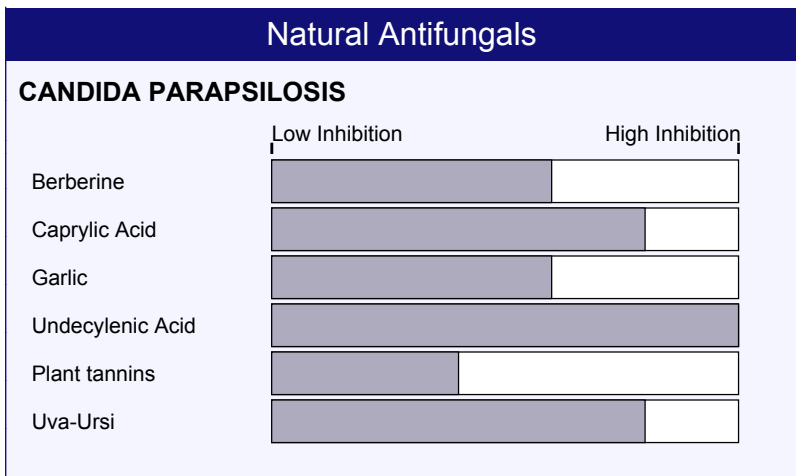
Azole Antifungals:

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Nystatin and Natural Antifungals:

In this assay, "inhibition" is defined as the reduction level on organism growth as a direct result of inhibition by a natural substance. The level of inhibition is an indicator of how effective the natural substance was at limiting the growth of an organism in an in vitro environment. High Inhibition indicates a greater ability by the natural substance to limit growth, while Low Inhibition a lesser ability to limit growth. In accordance with laboratory guidelines for reporting sensitivities, results for Nystatin are now being reported with natural antifungals in this category.



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Parasitology

Microscopic Exam Results

Methodologies used for the Ova & Parasites examination are sedimentation concentration of specimens followed by analysis by iodine wet mount and Trichrome stain permanent smear.

Dientamoeba fragilis: Many Trophozoites

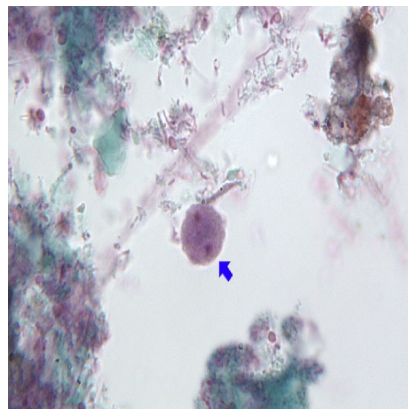
Parasitology EIA Tests

Inside	Outside	Reference Range
Negative		Negative
Cryptosporidium		
Negative		Negative
Giardia lamblia		
Negative		Negative
Entamoeba histolytica/dispar		

Specimen Tested: Stool

Representative photograph of organism(s)

Dientamoeba fragilis trophozoites



Macroscopic Exam for Larvae (if ordered)***Commentary***

Reported quantitation values were derived from a concentration of the sample(s) submitted and represent an "average" value.

Lab Comments

SENSI'S: All yeast, add'l bacteria

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Dientamoeba fragilis is a pathogenic flagellate. Transmission is by direct ingestion of the trophozoite, via contaminated water. The organism usually resides in the cecum and proximal colon. Symptoms may include diarrhea, abdominal tenderness, weight loss, fatigue, blood in the stool and eosinophilia, although asymptomatic infections can occur.