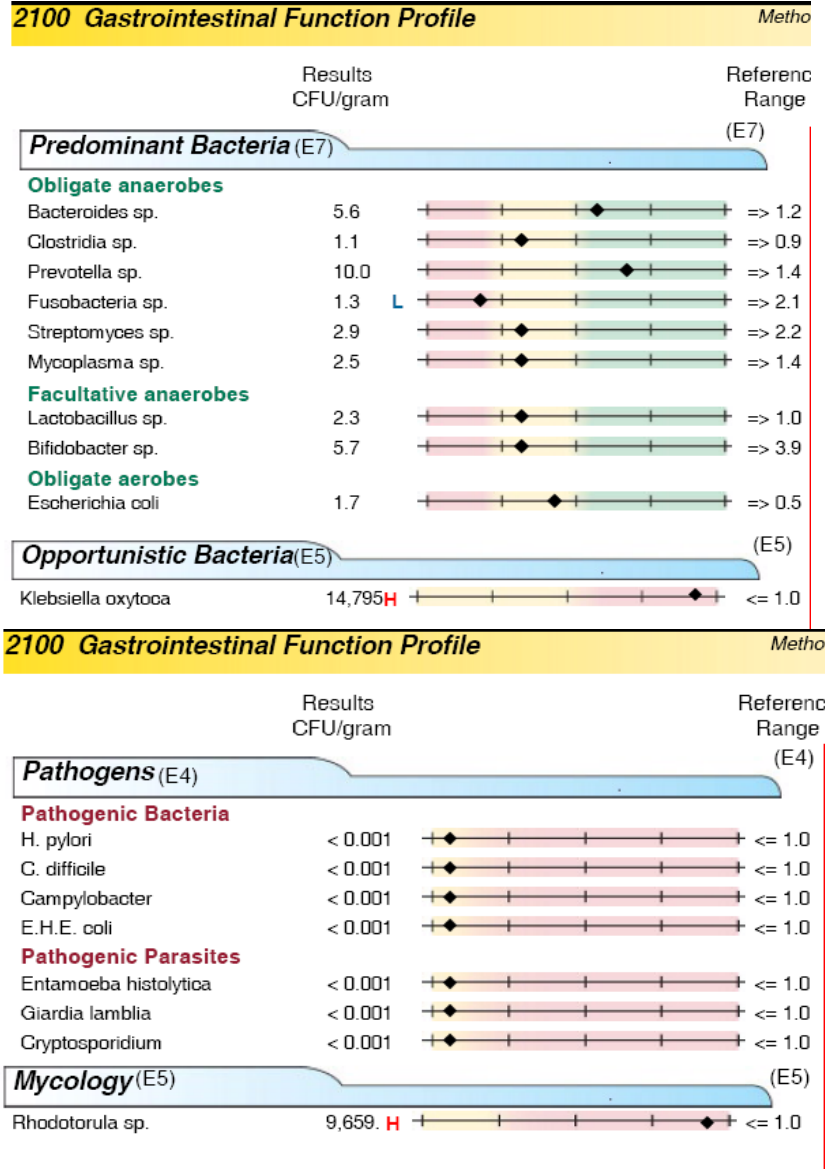


CASE 2 – 5/M Autistic

This 5 y/o boy developed IBS symptoms at 18 months old, with intermittent constipation. His gross motor development is normal, but he has been diagnosed as autistic with severe behavior and allergic manifestations.

Findings:



Here we find an even more severe overgrowth of *K. oxytoca*. Note that the assay is able to keep on counting target genomes over many orders of magnitude. Here the oxytoca is present at 1.48×10^9 /gm, and this child also shows concurrent extremely high levels of *Rhodotorula* sp. Incidence of *Rhodotorula* in our results is higher than from culture techniques, probably because it is identified microscopically, but grows poorly in usual culture media.

Drug Resistance Genes

aacA, aphD	Pos	gyrB, ParE	Neg
mecA	Neg	PBP1a, 2B	Neg
vanA, B, and C	Neg		

The drug resistance gene (aacA, aphD) indicates that Erythromycin and Levofloxacin or other amino glycoside class antibiotics should be avoided, even though *K. oxytoca* in this patient is sensitive to these drugs. Drugs like Amoxicillin may be used to reduce the *K. oxytoca* and Rhodotorula is sensitive to Amphotericin B or Fluconazole.

2100 Gastrointestinal Function Profile

Metho

Results		Reference Range
Beneficial SCFA		
Total SCFA	93.1	=> 35.0 mM/g
n-Butyrate	10.1	=> 4.6 mM/g
Acetate %	66.4	50.0 - 72.0 %
Butyrate %	10.9	8.0 - 28.0 %
Propionate %	21.3	15.0 - 22.0 %
Valerate %	1.4	1.2 - 4.0 %

Inflammation

Lactoferrin	7.1	<= 7.3 ug/mL
WBCs	Neg	Neg
Mucus	Neg	Neg-Rare

Immunology

Fecal sIgA	37	L	40 - 204 mg/dL
Anti-gliadin sIgA	5		<= 20 mg/dL

Plenty of metabolic activity is shown by the abundant SCFA and balanced percentages. Note the normal level of Lactoferrin, showing lack of inflammatory involvement currently in this patient with very active IBS due to profound microbial overgrowth. The immune barrier is weakened as shown by low sIgA.

Rec:

- Antibacterials and antifungals according to sensitivities
- Immune support with glutamine (consider colostrums) and glutathione
- Investigate food intolerances to lower the loading of GALT