Provider: Monica Cooke Visit: 09/01/2023 9:45AM Chart: FRIS000001

Chief Complaint: Follow Up/ Discuss Results

History of Present Illness:

Isaac is a 4 year old male with autism spectrum disorder. He experienced developmental regression at the age of 16 months. Isaac suffers from multiple conditions including disorder of CNS, immune system and digestive system.

Per form, He feels well. MOC feels at ~16 months of age they noticed that he lost visual contact stopped babbling his first words and wouldn't look when called by name. we investigated further and at ~20 months was diagnosed with autism but does not know the trigger for the health changes. He feels worse by staying at home for too long (a couple of days), not sleeping properly, and having too many activities on a single day. He feels better with food. He loves to eat and is frequently looking for food. He also likes to go outside and play at parks/nature, especially if water is involved (pool/beach).

He was born at 39 weeks, at the hospital by "C/section" and appeared healthy. Per MOC: "Mom had a scheduled c-section because the first pregnancy was already a c-section. The obstetrician recommended scheduling it at 38-39 weeks because the baby was too big and causing much discomfort. The c-section was normal." His developmental milestones are apparently normal, but regression started with a strong impression and the family agrees. He is not potty trained yet and not dry at night, still in diapers. He slowly is being more able to utter words, sing songs, more clearly and less baby talking. He has not lost language and has not lost eye contact. He is currently in therapy and his immunizations are partially done.

He sleeps for 8-10 hours, has initial insomnia, frequent night waking, insufficient rest for his age, and sometimes feels rested upon waking.

Diet: He follows a Gluten/Soy/Milk free diet with little corn, and no sugar. He is not picky, but he loves to eat bananas, cakes, cookies and kid's stuff.

His disordered CNS symptoms are: ASD, Cognitive developmental delay, Echolalia, Expressive language delay, Fatigue, Impairment, Mood swing, Neglect of common dangers, Obsessive behavior, Pain, Poor eye contact, Poor focus, running away, Screaming, Slowness and poor responsiveness.

His disordered digestive system symptoms are: Allergy to food, Carbohydrate craving, and Yeast in the gut.

His disordered immune function symptoms are: Onychomycosis.

The environmental findings are unknown. His physical exercises are running around the house all day. Denver-based daily therapy includes 20-30min of structured physical activity and workouts at school in the afternoons.

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Isaac is here to continue care and investigate relief for his constellation of symptoms and any contributing medical co-morbidities to his autism spectrum diagnosis.

UPDATES:

- -- Has GI Issues;
- --Laughs/cries w/o reasons
- --Poor communication
- --Hyper/runs back and forth; wakes up a lot overnight, sleepy in daytime (recent trial of new XR melatonin)
- --Sees Biomed MD in Brazil-- confirmed He is not progressing anymore
- --Was doing well 1st 6 months then plateaued
- --Seems to still have lots of issues with hs gut
- --Poor growth and height more recently (50--> 30% over last 2 years
- --Currently on nystatin/diflucan currently (2nd round)-- mild reduction of laughing, but not sure if changes from this-- will

04/21/2023 to discuss initial stool, GPL OAT and bloodwork results.

Updates:

- -MOC feels that pt not growing normally as he is shorter than other kids. Went to an endocrinologist & she stated he was OK & f/u in 6 months
- POC thinks the Diflucan and Nystatin was helpful, but when finished, symptoms returned- he is waking at 3am at night I stay awake till 5-6am. He is taking melatonin. He's laughing and crying a lot. He's running back n forth a lot
- pt also picks at his fingernails frequently and rubs his genital area

06/06/23 to discuss his phase 2 of gut modulation.

MOC reports that Isaac is still waking up from 3 am onward.

He continue to take melatonin which helps him to fall asleep.

She has added NAC at night.

She has already introduced Day chill 1/4 capsule day and night.

She reports that he has little energy and is tired often during the day.

She denies hyperactivity.

She reports therapy is working with him.

They have completed phase 1 and report less laughing and crying, but not gone.

MOC does not think Day chill has helped with this.

They will be in Valrico, Florida June 24th before seeing us in

07/12/23 to discuss his care plan.

Sleeping well in the US. MOC reports that it is probably in part to him sleeping with them. Continued waking up

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in the middle of the night at home.

BM daily, better with GUT protocol, they have noticed increased gas at times. None today.

They report that his bowels are good with treatment, but when they "stop" the consistency is like "peanut butter."

Parents have completed FRAT, Mitoswab and have received stool kit for repeat testing.

They plan on having other lab testing done back in Brazil with using Insurance.

On assessment Isaac was well nourished, easily distracted, seeking comfort from parents often.

TABBY tongue tie assessment borderline.

09/01/23 to discuss mitoswab results.

Per communication (08/08/23): patient stopped all supplements due to worsening of behaviours.

Parents report behavior changed after the GUT protocol and upon returning to Brazil.

Parents report concerning behaviors such as, "Isaac has been laughing a lot for no reason.

He is also more irritated, shouting, nervous, open and closing door and not talking as much."

They have sent his stool testing and are awaiting results.

He is currently taking Glutathione, L-carnitine, Methylfolate, Hydroxy B12 1 drop (as 2 drops a day cause irritability), Body Bio PC choline, Vit. D., DHHB 1/2 at night and from last visit: Lutimax, Biotin.

It is hard for him to take Butyrate due to tast.

They report that they have tried Methyl B12 drops and cyanocobalamin B12 injections in the past, which all caused more irritability.

Parents report that school is reporting that he is holding his ears.

VISIT FORM NOT DONE

Physical Exam:

Telemedicine

I discussed with the patient/family risks, benefits, side effects, alternatives and target symptoms of allopathic and functional medicine treatment options.

Patient understands that Lighthouse Complex Care does not function as a patient's primary care provider. We recommend that every patient maintain a relationship with an outside provider as their primary care provider.

I have personally spent a total of 75 minutes on this patient's case today. 60 minutes of this time was spent over Zoom with the patient and family, and 15 minutes of this time was spent in counseling/coordination of care with the remainder in pharmacology and supplements. This patient verbally consented to video consult. This patient verbally verified their location for the visit is Brazil.

Assessment:

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MITOSWAB, 08/01/23: Citrate synthase 242% Complex-I 54% Complex-II 63%

Complex-II+III 19%

Complex-IV 45%

FRAT, 07/10/23: Binding NEGATIVE Blocking NEGATIVE

disorder of the central nervous system

ASD, Cognitive developmental delay, Echolalia, Expressive language delay, Fatigue, Impairment, Mood swing, Neglect of common dangers, Obsessive behavior, Pain, Poor eye contact, Poor focus, running away, Screaming, Slowness and poor responsiveness.

disorder of digestive system

Allergy to food, Carbohydrate craving, and Yeast in the gut.

disorder of immune function

Onychomycosis

laboratory test result abnormal

DRAW 01/31/23:

SUBOPTIMAL:

Vitamin D 36.7

TSH 2.72

Free T4 1.4

NORMAL: Selenium, CMP (Urea, Creatinine, Phosphor, Calcium, Glucose, ALP), IgA, IGF-1 (somatomedin C), Endomysial Ab IgA, Transglutaminase, Zinc,

Urine Calcium, Urine Creatinine, Urine Phosphorus,

DATE 09/29/22:

ABNORMAL:

CRP 0.5 H (<0.1)

Fibrinogen 423 H (18-350)

Cholesterol 219 H

LDL 149 H (<110)

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SUBOPTIMAL:

Vitamin B12 307

Folic acid 10.9

TSH 0.59

Free T4 1.14

Free T3 3.24

Homocysteine 11.5 -----> Due to poor folate processing

NORMAL: Candida antibodies, Cadmium, Arsenic, Mercury, Lead, Aluminium, Vitamin C, ALP, CPK, Vitamin A, Apolipoprotien A1/B, CBC, Creatinine, Urea, Uric Acid, CMP, ANA, ferritin, Calcium, TPO, Iron, Copper 144.2, Magnesium, Potassium, Zinc 79.3, Lipid panel (the rest), Hb A1c, Insulin, ACTH, IGF1 somatomedin C, GFBP3-protein binding IGF-1 type3, Vitamin D, GGT, Ceruloplasmin, IgE, TIBC,

Cortisol salivary 0.07 (4-8pm),

Cortisol salivary 0.32 (6-10am)

DRAW 20/02/21:

ABNOMRAL:

Neuronal specific Enolase 29.38 (<18.3)

Zinc 131 (70-120)

Tumor necrosis factor alpha 13 H (<8.1)

NORMAL:

IgE- milk protein, Egg white, Soybean, Casein, Alpha lactoalbumin, Egg yolk, seafood (fish, shrimpp, Mussels, tuna & salmon), Cocoa, Gluten, Egg, oilseeds (peanut/hazelnut/brazil nut, almond & coconut), bananas, Beef, Chicken meat, selenium,

DRAW 01/09/2021:

ABNORMAL:

Serotonin 487 H (30-200)

SUBOPTIMAL:

Cholesterol 150

NORMAL: Abs CD3, Abs CD4, Abs CD8+, Abs CD56/CD16, Homocysteine, Insulin, Lipid panel, LDL, ASO, Anti-Gliadin IgA/G, Anti Deaminated Gliadin IgG, PTH, Hb A1c, CMV, Measles Ab, Rubella, Mumps, ANA, HHV6, Copper 198.3,

MTHFR: C677T normal/A1298C Heterozygous.

Patient: Isaac Franca

DOB: 11/06/2018

Provider: Monica Cooke

Visit: 09/01/2023 9:45AM

DRAW 08/10/2020:

ABNORMAL:

LDL-cholesterol 121 H (<110)

SUBOPTIMAL:

Ferritin 43.5

Free T4 1.43

Vitamin D 43.4

screening for disorder

GPL OAT 03/18/23:

Intestinal Microbial

Yeast & Fungal Overgrowth.

Bacterial Overgrowth

Clostridium Overgrowth.

Oxalate Metabolite Border-line High

Mitochondrial Markers:

Krebs cycle metabolites Low.

Nutritional markers:

Vitamin B6 Border-line Low

Vitamin C Low

Glutathione precursor Low

Amino acid metabolite Globally Low

GPL OAT 01/26/21:

Intestinal Microbial:

Yeast & Fungal Overgrowth.

Bacterial Border-line High.

Clostridium Overgrowth.

Mitochondrial Markers.

Krebs cycle metabolites Elevated.

Amino acid metabolites Elevated.

Ketone and fatty acids metabolites Elevated.

Sex: M

Chart: FRIS000001

Provider: Monica Cooke Visit: 09/01/2023 9:45AM Chart: FRIS000001

Nutritional markers Vitamin B5 (pantothenic) High Vitamin B2 (Riboflavin) High Glutathione precursor Low

Oxidative stress +

altered microbiota 03/22/23 (PCR/Cult)

Lactobacillus 1+

Enterococcus HIGH 2+
Clostridium HIGH 3+
Pseudomonas aeruginosa HIGH 2+
Staph aureus HIGH 1+
Staph simulans HIGH 1+
Strep salivarius/vestibularis HIGH 3+
Klebsiella pneumoniae/variicola HIGH 3+
Enterobacter cloacae complex HIGH 3+

Geotrichum HIGH 1+ yeast RARE

Elastase 263 L Lysozyme 762 H (<=500) Secretory IgA 126

TREATMENTS:

04/21/23:

A) Juniper

B) Cuturelle Kids Chewable

Genetic investigation procedure, 04/18/23:

INTERPRETATION: The genetic analysis of the complete Exome of Isaac Lobato França was carried out from the saliva sample, under the responsibility of TISMOO BIOTECH LABORATÓRIO LTDA (SP, Brazil). A genetic variant of unknown clinical significance was identified in the MED13 gene, associated with neurodevelopmental disorders (Table 1). This genetic analysis did not identify genetic variants associated with other health conditions as incidental and/or secondary findings.

Provider: Monica Cooke Visit: 09/01/2023 9:45AM Chart: FRIS000001

Plan:

MITOSWAB, 08/01/23: Citrate synthase 242% Complex-I 54% Complex-II 63% Complex-II+III 19% Complex-IV 45%

FRAT - Binding NEGATIVE Blocking NEGATIVE

Follow up for borderline tongue tie assessment {{comment}} Continue Gluten/Soy/Milk free diet with little corn, and no sugar.

Please do these steps as soon as possible so that the results will be back by your next appointment:

STEPS FOR VISIT 09/01/2023:

Diagnostic Steps:

Please do this as soon as possible so that the results will be back by your next appointment.

- 1. Have Isaac's PCP evaluate ears/sinuses due to ear holding and new behaviors since travel and return to Brazil to determine if there is pain source causing symptoms.
- 2. Stool test result with GPL CSAP is pending
- Labs are pending.

09/01/2023Treatment Steps:

Please start each intervention with 5 days in between to judge response. Unless otherwise indicated, discounted links to any supplements will be sent to you via Fullscript by email.

Treatment steps:

Please start each intervention with 5 days in between to judge response. Supplement prescriptions will be emailed to you through FullScript (with discounts) unless otherwise indicated.

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- 1. Medication review
- -Give B12 1 drop if that is all he will tolerate.
- -you may stop Butyrate or try giving in cooked foods
- For irritability give DHH-B 1/2 capsule during the day and decrease to 1/4 if too sleepy or even less OR increase if needed to try to calm Isaac and allow less irritability.
- 2. Then add ALA, 100mg in the morning, to help decrease oxidative stress. https://www.ubuy.com.br/en/product/4DXTE85LS-nutricost-r-alpha-lipoic-acid-100mg-240-capsules-veggie-capsules-non-gm
- 3. Then add Ubiquinol, 100mg in the morning, to help with complex-II+III activity.

This supplement is most effective as a softgel: You can squeeze the liquid out

https://www.ubuy.com.br/en/product/1GCJCAQ-now-supplements-ubiquinol-100-mg-high-bioavailability-the-active-form-of-complexity

Or you could give him liquid

Give 100 mg (2 tsp) in the am.

https://www.ubuy.com.br/en/product/1RK6PY0-qunol-liquid-coq10-100mg-superior-absorption-natural-supplement-form-of-country-com.br/en/product/1RK6PY0-qunol-liquid-coq10-100mg-superior-absorption-natural-supplement-form-of-country-com.br/en/product/1RK6PY0-qunol-liquid-coq10-100mg-superior-absorption-natural-supplement-form-of-country-com.br/en/product/1RK6PY0-qunol-liquid-coq10-100mg-superior-absorption-natural-supplement-form-of-country-com.br/en/product/1RK6PY0-qunol-liquid-coq10-100mg-superior-absorption-natural-supplement-form-of-country-com.br/en/product/1RK6PY0-qunol-liquid-coq10-100mg-superior-absorption-natural-supplement-form-of-country-com.br/en/product/1RK6PY0-qunol-liquid-coq10-100mg-superior-absorption-natural-supplement-form-of-country-com.br/en/product/1RK6PY0-qunol-liquid-coq10-100mg-superior-absorption-natural-supplement-form-of-country-country-com.br/en/product/1RK6PY0-qunol-liquid-coq10-100mg-superior-absorption-natural-supplement-form-of-country-cou

We can better serve you and prepare for your visit if you can help us by giving us some basic information before your appointment. Please fill out the Upcoming Visit Form 7-10 days before your next visit. ***Here is the link to the form: https://forms.gle/P1vhvXzbh5nrNqWZ6 It can also be found on our website: LighthouseComplexCare.com on the Current Patients page.*** We can better serve you and prepare for your visit if you can help us by giving us some basic information before your appointment. Please check-in and update your information at least 7 days before your next visit.

FUTURE STEPS:

Туре	Code	Modifiers	Quantity	Description
CPT	99215		1.00 UN	OFFICE O/P EST HI 40-54 MIN

Medications & Allergies:

Current Medication & Dosage	Dispense	SIG	PRN?	Indication
L-Carnitine 300mg	0	3ml BID	No	

Provider: Monica Cooke Visit: 09/01/2023 9:45AM Chart: FRIS000001

Current Medication & Dosage	Dispense	SIG	PRN?	Indication
Vitamin D3 3000IU	0	Vitamin D3 3000IU + Vitamin A 1500IU + Misx tocoferois 50mg + vitamin E + Vitamin K2 20mcg/5 oily drops, 5 drops a day.	No	
I-methylfolate	0	1mg BID	No	
Vitamin D3	0	2 drops at night	No	
NAC 500 mg oral capsule	0	1 capsule (500mg) daily	No	
Dietary Supplement	0	DHH-B 1/2 capsule at bedtime; Betain HCL 3x daily;	No	
Multiple Vitamins oral capsule	0	Vitamin formula – 45 doses - Oral solution: Vitamin B1 10mg, Vitamin B2 5mg, Vitamin B5 20mg, Vitamin B6 25mg, Nicotinamida 25mg, Lithiuim (CARB D3) 50mcg Biotin 50mcg, Zinc 20mg, Selenium 40mcg, Chromium 50mcg, Manganese 0.5mg, Vitamin C 300mg, NAC 150mg, Calcium 200mg, Ashwaganda 600mg, Magneesium 150mg, 5HTP 100mg, Melissa extr 1000mg Melissa extr 1000mg Betaglucan plus 200mg. Takes 1/2 dose, BID. After lunch	No	

Provider: Monica Cooke Visit: 09/01/2023 9:45AM Chart: FRIS000001

Current Medication & Dosage	Dispense	SIG	PRN?	Indication
Melatonin	0	melatonin Duo 2mg, 1 capsule, diluted in a little liquid, at bedtime.	No	
Probiotic 10 Ultra Strength oral capsule	0	1 dose qd. FÓRMULA PRÓBIÓTICA doses cápsula vegetais. L. rhamnosus GG1 BI CFU B. longum infantis1 BI CFU L. reuteri BI CFU B. breve 1 BI CFU L. paracasei BI CFU B. lactis 1 BI CFU L. paracasei BI CFU L. plantarum BI CFU L. salivarius BI CFU L. acidophilus 1 BI CFU L.	1 1No 1 1	
Vitamin B12 3000 mcg/mL sublingual liquid	0	1 drop (1000mcg) BID; total 2000mcg	No	
Melatonin 1 mg oral tablet	0	2mg at bedtime	No	