



PTP Fellowship Grand Rounds Case Study Submission

Patient / Client Information

Age

19

Sex

Male

Date of first visit

18/03/2024

Date of most recent visit

30/05/2024

Fellowship Student Information

Name

Leigh Anne Fleury

Email

laskaroo82@yahoo.com

License Type

PA-C

Area of Specialty / Focus

Family Medicine/Pediatrics

Patient Case Details

Primary Complaints

Food and environmental allergies- prior allergy testing at age 5, desires to retest

High blood pressure- on lisinopril for control, desires to taper off and eventually stop medication

Allergy-induced asthma- triggered by mice/mold exposure, uses albuterol inhaler infrequently

Current Medications

Lisinopril 20mg once daily

Current Supplements

Potassium Citrate 200mg 1 capsule 2 times per day

Magnesium Glycinate (MM) 125mg 2 capsules daily for blood pressure support and general health

Zinc Balance 15mg 1 capsule every other day during the cold season to help boost immune system

Whole Food Multivitamin for Teen Guys (Naturelo) 2 capsules daily for general health

A.I. Formula (Pure Encapsulations) 1 capsule per day to support natural immunity and protection against the effects of the COVID virus

ADK Eval (Designs for Health) 1 capsule per day for general immune support



Pertinent Diet Information

He avoids sesame seeds and limits gluten and peanuts as much as possible due to prior allergy testing results.

Pertinent Imbalances Identified Throughout Your Care

Multiple food and respiratory allergies per Quest 4-23-24 labs: Immunoglobulin E 550
Food Allergy Profile with Reflexes (15 allergens tested): most allergens at 0-1, including peanut (1), wheat (1), sesame seed (1), soybean (0&1), scallop (0&1), shrimp and hazelnut (1&2)
Respiratory Allergy Panel Region I w/REFL (5 allergens tested): mouse urine proteins (0&1), cat dander (1&2), highest to dog dander (1,2,&3) and cockroach (1,2,&3)
Respiratory Allergy Panel Region w/REFL - Mite and Mold Grouping (6 allergens tested): highest allergy to d. Pteronyssinus and d. Farinae (1, 2, 3, & 4), followed by cladosporium herbarium, aspergillus fumigatus, and alternaria alternata (1, 2, &3)
Respiratory Allergy Panel Region I w/REFL Tree Grouping (7 allergens tested): multiple allergies, highest to birch (1,2, &3); Respiratory Allergy Panel Region I w/REFL - Tree Grouping (2 allergens tested): oak (1&2) and elm (0&1); Respiratory Allergy Panel Region I w/REFL - Grass grouping (2 allergens tested): bermuda grass (0), timothy grass (1); Respiratory Allergy Panel Region I w/REFL - Weed Grouping (4 allergens tested): highest to ragweed (1&2), pigweed and mugwort (0&1), sheep sorrel (0)

Pertinent Lab Results

Cholesterol: TC 263, trigs 122, HDL 59, LDL 179, ApoB 111, lipoprotein A <10
LFTs: AST 29, ALT 57, GGT 100
Metabolic: FBS 82, A1c 5.3, Insulin 15.5, Trigs 122
Inflammation: CRP-hs 3.1
CBC: WBC 5.7, RBC 5.72, Hgb 15.8, Hct 49.3
Thyroid: TSH 1.850, tT4 5.6, fT4 0.9, fT3 4.2, rT3 8, TPO <1.0, TGA <1.0
Methylation: B12 626, folate 12.9, Hcy 11.6
Vitamin D: 35, PTH 23, Ca 9.7, calcitriol 47
Copper/zinc: copper 102, zinc 81, Zn/Cu 0.79
tTg negative

Treatment Plan & Outcomes in Chronological Order

For multiple respiratory and food allergens: Restart DFH allergy supplement daily. Referred to nutritionist to dietary changes (ex. Anti-inflammatory diet or low histamine diet x30 days).
For high blood pressure: Continue lisinopril 20mg daily. Check BP and HR 2x/day x7 days and load results into patient portal. Referred to health coach to work on lifestyle changes (ex. exercise)
For suboptimal Vitamin levels: Consistently take Vitamin D (aim for 5000IU) and Zinc (15-30mg) supplements daily. Zinc handout. Methylation handout.
For 4/2024 lab abnormalities: Repeat CBC, CMP, LFTs (AST, ALT, GGT), CRP-hs, IgE, and homocysteine at Quest
For elevated IgE: GI testing- Stool testing with Genova GI Effects Comp Profile test and GB Trio Smart SIBO breath test.
For elevated IgE with mold exposure/allergy: Mycotoxin Testing- Real Time Labs urine mycotoxin test.

Allied Providers

Chiropractor since 8 months old from neck injury during birth; 3x/week until age 3, now prn

Food and environmental allergy testing with naturopathic provider at age 5

Cardiology his senior year for elevated blood pressure- EKG, Echo, and CT renal normal, started on lisinopril; released from care at last appt

Additional Notable Information

Mold exposure- no known mold in current house (newer house, 20 years old with a dry basement); prior home in CT had mold and he may have brought spores and/or dust in packing boxes; possible exposure in HVAC system at the police station where he works 1 day/week.

Eczema as an infant- cleared around age 3; eliminated detergents at home w/ improvement in symptoms, also started eating a Weston Price diet and eval by chiro; still with mild dry scalp; he uses all types of body products now

Father with high cholesterol and mother with multiple allergies- possible familial component?

Patient is also overweight: 6'1", 245lb, no exercise



Questions / Discussion

His food allergy testing showed allergies to multiple nuts, the highest being hazelnut. How reasonable is it to ask him to limit exposure to all tree nuts?

Based on his lab results from 4/2024, he has markers of metabolic dysfunction, including elevations in insulin, cholesterol values, and LFTs. At what point would you consider alternative treatment options, in addition to diet and exercise, if his lab values continue to remain elevated?

He is young and seemed to have some hesitancy and resistance to want to change some of his habits. How would you address a patient that seems resistant to change from a functional medicine perspective when his/her sedentary lifestyle and abnormal lab results are already indicating metabolic dysfunction that can progress over time causing more serious health consequences in the future?



PTP Fellowship Grand Rounds Case Study Submission

Patient / Client Information

Age

47

Sex

Male

Date of first visit

22/01/2024

Date of most recent visit

23/05/2024

Fellowship Student Information

Name

Alex Kentner

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License Type

APRN

Area of Specialty / Focus

Family

Patient Case Details

Primary Complaints

CC: baseline assessment of metabolic and cardiovascular health, liver/kidney function, and vitamin deficiency.
Goal: Disease prevention
Goal: Longevity
Goal: Strategy for cholesterol and blood sugar levels
Wanting medical provider continuity of care

Current Medications

Crestor 20mg QD
Ketoconazole shampoo 2% QD
Tacrolimus oint 0.1% QD
Promiseb cream QD
Aspirin 81mg daily



Current Supplements

Daily Synbiotic 2 caps daily in the morning
Milk Thistle extract 300mg 3 caps daily at bedtime
Biocidin 1 cap TID
Ubiquinol 200mg 1 softgel daily with breakfast
L-Glutamine powder 1 scoop 1-3 times daily
Arterosil HP 1 capsule BID
Ultimate Omega 2 softgels daily
Zinc Picolinate 30mg 1 capsule daily
Trifolamin - Folate 680mcg / Vit B12 3000mcg 1 lozenge daily
Vitamin D Supreme w/ Vit K1, K2 5000iu/550mcg 1 capsule daily

Pertinent Diet Information

Leans toward pescatarian diet, heavy meat.

Pertinent Imbalances Identified Throughout Your Care

Familial Hypercholesterolemia (FH)
Impaired glucose
SIBO - elevated hydrogen

Pertinent Lab Results

FBS 97 (75-85)
A1c 5.9 (4.6-5.3)
tChol 326 (150-220)
TSH 2.48 (0.5-2.0)
ALT 32 (5-26)
Vit D 27 (35-60)
HDL 45 (50-85)
LDL 261 (50-140)
Apo B 181
CRP-hs 4.3 (0-1)
Zinc 58 (81-157)
Zn/Cu 0.49 (0.85-1.2)



Treatment Plan & Outcomes in Chronological Order

Crestor 20mg QD w/ Ubiquinol 200mg
Cardiologist for further management and diagnostics concerning FH
Begin pre/probiotic & L-glutamine d/t stool results

Allied Providers

Nutritionist, Health Coach

Additional Notable Information

Newly started on Crestor 20mg QD w/ Ubiquinol 200mg

Scheduled to f/u with Cardiologist.

CardioRisk Scan arterial age 64, High early event risk, high plaque burden (2.3).

Coronary Calcium score of 476.7 (severely increased) (presence of calcified plaque in the coronary arteries)

GI effects - Sec IgA

Questions / Discussion

Balance between Functional Medicine and traditional resources/medical care for management of FH.
Is there a one stop guide regarding supplements to be paired with RX medications?
Genetic component, his children are + for gene.