

Short Report

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Fever of unknown origin from Serotonin syndrome of supplements

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Abstract

A 54-year old female presented to an outpatient primary care clinic with a one month history of recurrent, high fevers. A complete review of systems was negative. The patient underwent a thorough infectious work-up and well as imaging to evaluate for possible malignancy. All of this testing was normal. After obtaining a more detailed history, patient revealed that she had started 2 supplements shortly prior to developing these fevers -5-HTP and red yeast rice supplement. Her fevers remitted after stopping these supplements.

Keywords: Fever of unknown origin; Serotonin syndrome; Natural supplements.

Introduction

A 54-yo female presents for recurrent, high fevers that started about a month ago. She has been seen multiple times for this complaint without a clear diagnosis. Her highest temperature was 103.4, her temperature stays around 102 if untreated. Her fevers start in the morning and spike, she takes ibuprofen and her temperature comes down. She has had previous fevers when she gets immunizations [1,2], but has not had any recent vaccinations. She denies any other associated symptoms, no cough, congestion, shortness of breath, abdominal pain, nausea, vomiting or dysuria.

Case presentation

The patient was out of town at the onset of these fevers so went to a local urgent care. She was tested for the most common bacterial and viral illnesses including streptococcal pharyngitis, mononucleosis, influenza and COVID. These were all negative. She also had a normal CBC and a normal urinalysis.

When patient returned home she was still having fevers and came to our clinic. Her physical exam was unremarkable, notable for no adenopathy. Streptococcal and COVID testing were repeated and were again negative. Additional testing included

a negative test for tuberculosis, a negative clostridium difficile test and a negative gastrointestinal pathogen test. She also had additional lab drawn. She had mildly elevated liver function tests and an elevated CRP. Based on this information, a viral hepatitis panel was drawn which was negative. At this point she had a CT of her abdomen and pelvis was unremarkable. Given that we were unable to find an acute cause for her fevers, we got a more detailed medical history [3,4]. Her previous medical history is significant for anxiety, arthritis, asthma, basal cell carcinoma, oral herpes, osteopenia, serrated polyposis syndrome and Vitamin D deficiency. She is completely vaccinated. She had no pertinent surgical history of family history.

We next reviewed her current medications.

Current medications

- 5-HTP once daily
- Albuterol HFA 2 puffs INH every 4 hours as needed
- Alprazolam 0.5 mg three times daily as needed for anxiety
- Cetirizine 10 mg PO daily as needed for allergy symptoms

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- Cyclobenzaprine 5 mg three times daily as needed
- Dulera (mometason-formoterol) 2 puffs INJH once
- Progesterone 200 mg PO qday
- Red yeast rice extract 600 mg 2 capsules by mouth twice daily
- Valtrex 500 mg every 12 hours
- Allergies: Sulfa and amoxicillin.

Discussion/conclusions

Serotonin syndrome is often the last thing on our differential for fevers, behind more common things such as infections or malignancies but should not be discounted [5,6]. Patient had a significant infectious work-up despite the fact that she was not having any focused symptoms that would signify infection.

During the focused medication review it was determined that patient had started her 5-HTP and red yeast rice supplements shortly prior to developing these fevers. When she stopped taking these supplements, her fevers resolved leading us to a diagnosis of Serotonin syndrome. Consider other medications that can lead to hyperthermia.

Declarations

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