"Where, Where, Where? My Fingers Must Be in the Juice!"

A Rare Case Presentation of Steroid-Induced Excited Catatonia in the Absence of Other Psychiatric Symptoms

Shahida Mizan, MD, Alex Ambrose, DO, Lauren Mahoney, MD
Virginia Commonwealth University Health System, Richmond, VA

CASE PRESENTATION

- 72 year old female with no past psychiatric history. Started on prednisone 30 mg twice daily for Giant Cell Arteritis, which had been tapered to 20 mg BID over the course of 5 weeks prior to presentation.
- 22 days after initiation of steroids, patient was noted by family to have developed new psychiatric and behavioral symptoms at home:
  - ***Brushing and blow drying hair for hours, resulting in hair loss and burned scalp***
  - ***Standing in the showing on one foot for extended period of time***
  - ***Repeating phrases over and over at home***
  - ***Hyperverbal, less sensical speech content, appeared confused***
  - ***Several days prior to presentation, patient had not been eating or drinking***
- Brought to the ED by family, where she was initially admitted to Internal Medicine who diagnosed patient with steroid induced psychosis with a plan to initiate antipsychotics and consult Psychiatry. Upon Psychiatry assessment, patient was noted to have a Bush Francis score of 18
  - ***Verbigeration:** Throughout the entire interview, patient was speaking constantly. Most of content was non sensical and repetitive. She would not answer questions or follow commands.*
  - ***Excitement:** Patient in near constant motion throughout most of the interview, with mostly non goal oriented movements of her extremities and rearranging the blankets around her legs.*
  - ***Echolalia:** noted to repeat words of both her family and the examiner*
  - ***Posturing:** Holding arm against gravity throughout, at other times would roll on her side and have her arm and leg propped up on the bedside rail in a seemingly uncomfortable position and hold it here*
  - ***Mannerisms:** Patient held her hand in odd position throughout interview. She had her 4th and 5th digit of her hand flexed, and her 2nd and 3rd digit extended. She held her arm up against gravity, and had her two extended fingers resting in a cup of juice held by her daughter. Whenever her daughter would attempt to move the juice away from the patient, the patient became upset. Notably, patient kept referring to the cup of juice as "carrots" and when it was moved would say "Where, where, where? My fingers must be in the carrots!"*
- 1 mg of IV Ativan challenge was administered. Within five minutes, patient's speech slowed, became less repetitive, and content became more sensical. She relaxed her arms and fingers and rested them by her sides. She was able to follow commands and answer questions. She stopped perseverating on having her fingers in juice and allowed her daughter to take the cup away. She asked the examiner if she could have a sandwich. At this point, family felt that the patient had returned near to baseline. She did not appear psychotic or mania once excited catatonia symptoms resolved. Psychiatry recommended that antipsychotics be held, and she was initiated on scheduled benzodiazepines.

HOSPITAL COURSE

- Admitted from 9/7 - 10/11 to Internal Medicine with Psychiatry C/L, Pharmacy, and Rheumatology following
- Started treatment with IV Midazolam 1mg q8h (Ativan shortage in the hospital at the time) however symptoms not well controlled
- Switched to IV Diazepam 5mg TID which she responded well to
  - Slow transition to PO Diazepam while tapering steroids
  - Added Memantine 5mg BID as adjunctive treatment
- Transitioned to Monthly IV Tocilizumab infusions
- Discharged on PO Diazepam taper, Memantine, Decreased Prednisone 5mg TID, and IV Tocilizumab
- Post discharge, no longer on Prednisone. Continues Monthly Tocilizumab infusions and followed by both Rheumatology and Geriatric Medicine
- Followed by OP Geriatric Psychiatry where Diazepam taper was extended by 1 month due to ongoing symptoms requiring brief ALF stay
  - Diazepam discontinued 12/20
  - 1 month follow up back to living at her own home with family, still on Memantine
  - 3 month follow up, tapered off Memantine
  - 10 month follow up, doing very well on no psychotropic meds (MOCA 30/30, 0 Bush Francis)

DISCUSSION

It is well established that steroids can cause affective and psychotic symptoms. However, based on our literature review, steroid induced catatonia has been reported much less frequently, and may be underrecognized.

We argue this case is unique given that the patient manifested excited catatonia in the setting of high dose steroids, without other accompanying psychiatric symptoms. Once her catatonia had resolved, she did not demonstrate any underlying psychotic or affective disturbance

Therefore, this was not a case of steroids inducing psychosis or mania which in turn manifested with catatonia. Rather, this is a case of steroids directly inducing an excited catatonia.

This distinction is of course important as it affects and directs treatment. While the patient's primary team had assumed her presentation was the more commonly encountered steroid induced psychosis, our determination that the patient was experiencing catatonia in the absence of other psychiatric symptoms spared her from the unnecessary administration of antipsychotics and/or mood stabilizers.

See QR code for further information regarding our references.

VCU Health