Catatonia Mimicking Regression in Down Syndrome

CASE REPORT AND REVIEW OF LITERATURE

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CASE REPORT

10 year old girl with Trisomy 21 and hypothyroidism presenting with regression over the last year, most notable over the last 6 months.

Lost skills: reciting her ABCs, counting, singing in school chorus, holding the same level of conversation she used to.

Mood lability: crying a lot more and often “out of nowhere”.

Change in ADLs: She used to bathe and dress herself and stopped doing these.

Possible stereotypes: rocking side to side when she is standing or walking. She seems more fidgety and often likes to have something to shake in her hands.

Exam: Her affect seemed mildly depressed and her fund of knowledge and executive functioning were grossly delayed. Throughout the visit she was preoccupied with watching television on her iPad. Otherwise nonfocal.

Initially diagnosed with depression, which appeared to manifest as regression. Her inability to complete her activities of daily living seemed to stem from a lack of motivation.

Started on Sertraline and subsequently escalated by PCP with no response.

Progressive steady decline over the 9-10 months was not explained by Down syndrome alone and her lack of response to sertraline argued somewhat against depression as a sole diagnosis.

Mother researched the internet for regression in Down syndrome and asked if her presentation was consistent with Catatonia.

The investigation ruled out thyroid disease, seizures, sleep apnea, anemia, or cardiac disease.

24 hour EEG: This is a normal 24 hour ambulatory EEG.

MR head: No intracranial abnormalities are identified.

CATATONIA EVALUATION

Of the 1/800 children that are born with Trisomy 21, it is not uncommon for them to present with deterioration in function and the typical resulting diagnosis is depression as the etiology of regression.

However, catatonia is not typically evaluated for and can be a reversible, treatable cause of regression in children and adolescents with developmental regression. And thus, it should be considered.

BENZODIAZEPINE TRIAL

Given that a thorough evaluation for alternative causes was negative, a supervised trial of benzodiazepine administration was coordinated. This is diagnostic AND therapeutic.

Prior to administration: KH was in bed watching a television show on her tablet. She was extremely focused on the show and oblivious to her family or surroundings. She was very hard to distract from the tablet. Additionally, as she has been doing for quite some time, she was repeatedly shaking an object in her right hand and then switching off to the left hand.

After administration: Mom was then able to take the tablet away and KH was comfortably sitting in her lap. Over the next 15 minutes, she was able to talk to her sister on the telephone and recognize herself and family/friends in the room and in photos mom showed her. She seemed more alert, interactive, curious, and aware of her surroundings. Mom played songs that KH used to sing along to, but hadn't been doing over the last year or two. She began to quietly sing along with her mother and the music. Child neurology, child psychiatry, nursing, and family were all present at the bedside. Everyone was in agreement that this was a successful trial and she should be continued on oral lorazepam to treat catatonia.

CATATONIA TREATMENT

Benzodiazepines are the first-choice treatment for catatonia. Often, dose escalation is necessary and, in some cases, baseline function is not achieved with a benzodiazepine alone.

In these cases, or when catatonia becomes refractory to benzos, electroconvulsive therapy may be needed.

CATATONIA

The main symptoms of catatonia are:

- a change in motor activity (reduced or loss often increased motor activity)
- unusual movements (stereotypies, grimacing, freezing, infrequent blinking, motor or vocal tics, posturing)
- changes in speech (reduced meaningful speech, mutism, echolalia, increased latency)
- changes in oral intake (reduced appetite and/or slowing down of food intake)
- decline in activities of daily living
- blader or bowel incontinence

Presenting symptoms of unexplained regression and impairing symptoms across multiple domains (motor, speech, behavior, mood, and daily living skills) are consistent with catatonia. Although mood symptoms can be variably present, catatonia diagnosis is based on the presence of prominent motor and other regressive symptoms (ADL, speech, social).

Ultimately, the catatonia diagnosis was made based on the predominance of motor symptoms in addition to the lack of response to antidepressant or mood stabilizers.

REFERENCES

Ghazizadeh N, Nassiri A, Miles J. Catatonia in Down syndrome; a treatable cause of regression. Neuropsychiatric Disease and Treatment 2015;11 941–949
