URINARY INCONTINENCE SECONDARY TO ANTIPSYCHOTICS

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ABSTRACT:
Antipsychotics are associated with variety of the side effects and Urinary Incontinence UI is one of them. However, little is known about UI secondary to antipsychotics. Though, most of the atypical antipsychotics have almost the same mechanism of action but Risperidone and Clozapine seems to have stronger association with UI. There are several case studies which have reported UI as one of the side effect of antipsychotics but there is a lack of randomized controlled trials. Different hypotheses have been proposed for the causation of this side effect of antipsychotics however there is no general consensus about the mechanism of UI induced by antipsychotics. Literature search was done to find out the most plausible cause of UI secondary to antipsychotics. In this poster, different theories, which have been suggested previously for secondary UI, are discussed.

LEARNING OBJECTIVES:
1) Mechanism of Urinary Incontinence induced by antipsychotics
2) More attention to under reported side effect of the antipsychotics

CASE:
Anthony was a 13 year old white male with multiple psychiatric diagnoses including major depressive disorder with psychotic features and autism spectrum disorder. He was admitted to psychiatric facility for worsening depression with suicidal ideation. He also reported of hearing voices which command him of putting himself in dangerous situations such as running out of the house and use drugs. He was on Risperidone 1mg at bedtime by mouth and fluoxetine 20 mg daily by mouth. For better control of his symptoms, his Risperidone was gradually titrated to 3 mg. Several days after the increase of Risperidone dose, he started experiencing Urinary Incontinence during the night time. He displayed some difficulty in explaining his new symptom probably because of autism and embarrassment related to this side effect in this age range. He rationalized that he feels “lazy” and that’s why he does not go to the restroom and instead urinates in the vent of heating. However, staff reported of bed sheets soiled with urine. It appeared that his new onset urinary incontinence was a treatment emergent symptom.

DISCUSSION:
A number of mechanisms have been described in the pathophysiology of antipsychotic induced enuresis, including: 1) Decreased tone of the internal bladder sphincter due to alpha 1 adrenergic blockade (2) Reduced dopamine transmission in the basal ganglia (3) Urinary retention and subsequent overflow incontinence due to anti muscarinic properties of anti-psychotics.
However, in the absence of other systemic adrenolytic effects, absences of other alpha adrenergic blocking actions don’t explain this phenomenon adequately. Incontinence does not seem to be related to sedative effects of anti-psychotics as patients experience UI both during day and nighttime. However, the incidence of drug-induced UI is probably small in the general population. There is a group which is particularly at risk, in which precaution should be exercised when prescribing. Children and youth on autism spectrum disorder make up large percentage of case reported in which drug-induced incontinence has occurred. Urinary incontinence is an embarrassing side effect resulting most of the patients not sharing it with their physician. Detailed history is mandatory to find out this side effect in order to address this appropriately. Once this side effect emerges, it can be treated by decreasing the dose of antipsychotic or by switching to other antipsychotic which has low affinity for alpha 1 receptors such as Olanzapine.

References: