



## CASE SERIES

# Delirium Improving Symptoms of Chronic Schizophrenia in Elderly: A Case Series

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## Abstract

Delirium is an acute medical emergency, consisting of fluctuations in attention, cognition and consciousness disturbance found more commonly in elderly in clinical settings because of multiple comorbidities and etiologies. In the clinical setting of Geriatric Mental Health (GMH) we found delirium improved psychotic symptoms in elderly having Schizophrenia as their prime diagnosis from almost 30 years, delirium episode made them antipsychotic free, in ward both patients were treated without antipsychotics, as no psychotic symptom reported in ward single day. Delirium subsided and after that no psychotic symptoms reported in elderly patients, we highlight such 2 cases of our clinical ward settings where we concluded that delirium somewhere improved psychotic symptoms completely. We will try to establish some delirium pathophysiology and mechanism of delirium in improving psychosis.

## Keywords

Delirium, Elderly, Psychosis, Drug free

## Introduction

Delirium, a medical emergency with multiple etiologies causing great clinical burden in emergencies, is found more commonly in elderly subjects and worsens treatment prognosis because of deleterious effects of it on brain [1]. Review studies explain that 15-30% of older persons have delirium during IPD admission and 55-58% developed during ward stay [2]. Delirium patients generally presents with psychotic symptoms of Schizophrenia, delusional disorder, hallucinations are more of visual entity, rather than auditory of psychiatric

illness, clouding of consciousness, floccillation are easier in differentiating it from psychiatric functional illness [3]. Delirium mainly caused because of polypharmacy, more anticholinergic burden in elderly, poor brain immunity because of cognitive impairment is prone to it, neurotransmitters are common both in pathology of delirium and psychotic illness like dopamine, glutamate, acetylcholine [4]. In ward both patients had delirium before admission just previous night, after that subsided in ward within 2 days, their psychotic symptoms which were prominent before delirium episode of schizophrenia for which they were on antipsychotics reported no single psychotic symptoms, we highlight this phenomenology in our case series of 2 elderly male patients admitted in our GMH ward.

## Case A

Mr. R age 66 years married male, came in our OPD with complains of confused behavior, searching behavior, shouting on family members, aggression, sleep complains, from 2 days, he had mild fever before admission about 2 days before, admitted in ward all his medicines were stopped, he was on Risperidone 3 mg, Lorazepam 2 mg, Telmisartan 20 mg, for last 2 years for his illness F20, Schizophrenia Paranoid, his blood report showed TLC 12,300 cells/mm<sup>3</sup> (< 11000), UTI E coli present in culture report urine, after 2 days delirium subsided slowly after etiology was focused for treatment, he was given only melatonin 10 mg in

night, fluids and multivitamins supplements, for next 16 days till his discharge no delusions no hallucinations were reported by him not single day, so with treating team it was decided not to start antipsychotics until a single psychotic symptom reappeared but that did not happened, he was discharged on T Melatonin 10 mg HS, T PCM 650 mg for pain in knee, T Neurokind forte Vitamin B12 was given for 2 weeks follow up from ward. In the next follow up after 3 weeks no psychotic symptoms reported neither family member reported. So same ward discharge treatment was continued from OPD. The patient till date is antipsychotic free and no psychotic symptoms reappeared in him again.

## Case B

Mr. RY age 69 year married male, follow up patient of our OPD in GMH, prime diagnosis of F20., Schizophrenia paranoid type, developed delirium 3 days back coming to OPD, he had urine incontinence in clothes, confused behavior, no identification of family members, confusion worsened more in night, his sleep pattern reversed, he started to shout unnecessary, piling bed sheets as reported by wife who was reliable informant, he was admitted in ward, blood revealed low hemoglobin 9.8 g/dl (13-17), TLC raised 11,720 (11,000), ESR 43 mm/hr., rest all blood parameters and urine profile was normal limit. In ward he was treated for sleep mainly T Zolpidem 5 mg and T Melatonin 5 mg on sos basis, vitamin D3 and vitamin B12 supplements were added, he was out of delirium in ward on 3<sup>rd</sup> day, till his discharge 15<sup>th</sup> day from ward he did not showed any symptoms of delusion no auditory hallucinations, he was having this symptoms before delirium symptoms started to relapse but after delirium subsided we did not find any such psychotic symptoms at all in ward, he was discharged on T Metformin 500 mg OD as he was diabetic, T Zolpidem 5 mg HS and T Melatonin 5 mg on sos, basis he came in OPD after 1 month still wife reported no frank psychotic symptoms he was asymptomatic, we removed Melatonin from treatment and continued rest treatment, patient in follow up is asymptomatic, no active symptoms of Schizophrenia reported.

## Discussion

Some studies and clinicians reported delirium as an unknowingly therapeutic agent in improving illness symptoms, stress and brain insult caused by delirium, when subject is faced with stress, or emotional stress, the brain adapts to use protective mechanism to reduce stimulation and such self-auto mechanism of body might rectify preexisting active disorders [5]. Cancro and Wilder, et al. showed a patient on Chlorpromazine with psychotic symptoms developed delirium due to cardiac pathology, after that episode of delirium the psychotic symptoms vanished from clinical picture and no more chlorpromazine was given to the patient [6]. Simeon, et al. treated a psychotic patient with D-Cycloserine and developed delirium because of that improved

psychosis in the patient [7]. Delirium might act as an agent in improving psychosis by resynchronization of neurotransmitters, they might get balanced because of this effect of delirium and might improve psychotic symptoms [8]. ECT principle might be like delirium because ECT causes post ictal confusion by alteration of neurotransmitters and that seizure induction might help in improving the psychosis, a possibility that delirium because of ECT might help in improving the psychotic symptoms of the patients [9]. Underlying delirium pathophysiology and neurotransmitter abnormalities might change the brain blood permeability and the body immunity mechanism might helped in treating the psychotic symptoms, increased activity of Hypothalamic pituitary axis, might helped in maintaining balance of cytokines and possibly clinical effects in psychosis improvement [10].

This case series were mainly to highlight some new dimension of treatment modality in chronic psychosis and advantages to keep patient free from antipsychotics, but it's a challenge to induce delirium in a patient as of unethical concerns related but a subthreshold dose to induce delirium in subjects with proper consent can be planned in future for clinical response in chronic subjects and maintaining their premorbid status without drug if possible, in this side effects and cost burden of drugs can be prevented.

## Conflicts of Interest

Nil.

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