MAYO CLINIC

Delirium, Dementia, or Schizophrenia: A Case Report and Literature Review of New-Onset Psychosis in a Geriatric Patient

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BACKGROUND

- In 2000, an international consensus statement proposed a distinction between early-onset schizophrenia (EOS) and schizophrenia that presents after age 40.[2]
- Very late-onset schizophrenia-like psychosis (VLOSLP) denotes first-break primary psychosis in patients >60 years old.
- We describe an elderly patient with no known psychiatric history who presented with acute psychosis that resolved with high-dose olanzapine, prompting consideration of an undiagnosed primary psychotic disorder.
- We also present a systematic review of VLOSLP case reports.

CASE REPORT

- History of Present Illness
  - 75-year-old woman admitted to internal medicine for altered mental status after being found huddled outdoors in freezing temperatures.
  - No known past medical or psychiatric history.
  - Medical Work-Up
    - Head/brain CT/MRI: Mild parenchymal volume loss and scattered leukoaraiosis
    - EEG: Mild diffuse slowing and periodic discharges with triphasic morphology
    - CSF: Aβ42 = 886 (low), total tau = 104 (normal)
    - Remainder of work-up (blood, urine, infectious studies) unremarkable
- Initial Psychiatric Consultation
  - Mental Status Exam: Affective energy, overt confusion, auditory and visual perturbations, paranoia, gross thought disorganization, and consistent attentiveness without waxing/waning
  - Initial recommendations: olanzapine 5 mg q.h.s. ± 2.5 mg b.i.d. p.r.n.
- Follow-Up
  - No improvement initially. Patient experienced insomnia and stopped eating.
  - Olanzapine gradually titrated to 20 mg daily.
  - Psychosis significantly improved one week later. Patient discharged to home.

LITERATURE REVIEW

- Total: 7 studies, 9 cases
- Age (years, mean ± SD): 72.6 ± 7.7
- Female: 8/9 (89%)
- Persecutory delusions: 8/9 (89%)
- Hallucinations: 7/9 (78%)
- Negative symptoms: 2/9 (22%)
- No patients had a prior psychiatric history.
- MMSE within normal limits for 6/6 patients.
- Treatment: Predominately second-generation antipsychotics ± neuromodulation in 2 cases.
- Response: All patients exhibited significant improvement in psychosis following treatment.

Figure 1. Flow Chart

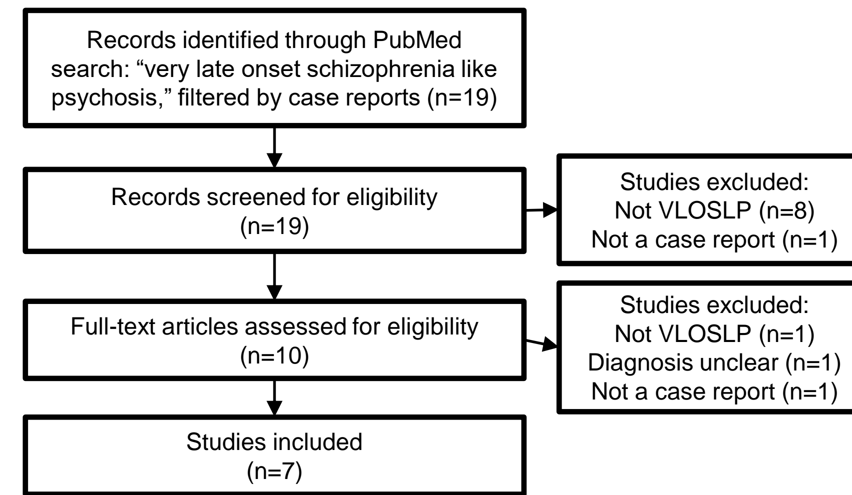

TABLE 1: Characteristics of the Included Cases

Year	First Author	Age/ Sex	Delusions	Hallucinations	Negative Symptoms	Other	Treatment
2023	Regala	64/F	Persecutory	Multimodal	N/A	N/A	Clozapine, aripiprazole, amisulpride
2022	Satake	74/F	N/A	Auditory	Avolition, asociality	MMSE 28/30	Risperidone, quetiapine, aripiprazole, blonanserin, asenapine, paliperidone, ECT
2021	Satake	68/F	Persecutory	Visual	N/A	Anxiety, MMSE 28/30	N/A
		81/F	Persecutory	N/A	N/A	Amnesia, MMSE 28/30	Quetiapine
2021	Melo	80/F	Persecutory	Auditory, visceral	N/A	MMSE WNL	Risperidone
2020	Zollner	66/M	Persecutory	Auditory, tactile	N/A	N/A	Olanzapine, TBS
2014	Sharma	72/F	Persecutory	Auditory	N/A	Insomnia, MMSE 28/30	Risperidone
		84/F	Persecutory	Auditory	N/A	MMSE 30/30	Risperidone
2011	Tsujino	64/F	Persecutory	N/A	Catatonia	N/A	Haloperidol, lorazepam, aripiprazole

DISCUSSION

- VLOSLP differs from EOS in prevalence, demographic characteristics, and clinical presentation.[1,3]
- Differential diagnosis may include delirium and/or neurodegenerative disease.
- Notable distinctions include preserved cognitive function, absence of waxing/waning attention, and positive response to neuroleptics.

TABLE 2: Distinctions between EOS and VLOSLP

	EOS	VLOSLP
Incidence among patients with schizophrenia	80%	2%
Demographic characteristics	Male predominance	Female predominance
	Strong family history	Weaker family history
	Low post-secondary education completion	Higher post-secondary education completion
	High rates of substance use	Low rates of substance use
	Low premorbid psychosocial functioning	Higher premorbid psychosocial functioning, but Cluster A personality traits are often present
Clinical presentation	Presence of both positive and negative symptoms	Positive symptoms predominate (particularly paranoia, persecutory delusions, and multimodal hallucinations). Negative symptoms are rare.
	Significant cognitive deficits	Milder cognitive deficits

CONCLUSIONS

- Acute psychosis in the elderly may pose a diagnostic dilemma for consultation/liaison psychiatrists.
- A primary psychotic disorder should not be overlooked in geriatric patients as its management differs substantially from that of delirium or dementia.

REFERENCES

1. Abou Kassm S, Limosin F, Naja W, Vandel P, Sánchez-Rico M, Alvarado JM, von Gunten A, Hoertel N; CSA Study group. Late-onset and nonlate-onset schizophrenia: A comparison of clinical characteristics in a multicenter study. Int J Geriatr Psychiatry 2021 Aug;36(8):1204-1215. DOI: 10.1002/gps.5512
2. Howard R, Rabins PV, Seeman MV, Jeste DV. Late-onset schizophrenia and very-late-onset schizophrenia-like psychosis: An international consensus. The International Late-Onset Schizophrenia Group. Am J Psychiatry 2000 Feb;157(2):172-178. DOI: 10.1176/appi.ajp.157.2.172
3. Suen YN, Wong SMY, Hui CLM, Chan SKW, Lee EHM, Chang WC, Chen EYH. Late-onset psychosis and very-late-onset-schizophrenia-like-psychosis: an updated systematic review. Int Rev Psychiatry 2019 Aug-Sep;31(5-6):523-542. DOI: 10.1080/09540261.2019.1670624

DISCLOSURES

All authors have no funding nor potential conflicts of interest to report.

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