Toolbox: Management of behavioral and psychological symptoms of dementia

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While antipsychotics have been used to treat psychosis or aggressive behaviors in dementia populations, they appear to have a high side effect profile that leads to high discontinuation rates.[1] Additionally, antipsychotics, as a class, carry a black box warning for use in the dementia population. Both CMS and APA have announced initiatives over the past two years to reduce the inappropriate prescribing of antipsychotics in order to manage BPSD. Mood stabilizers may be considered as an alternative to neuroleptics. This table presents data on the efficacy of mood stabilizing drugs for the management of BPSD.

Table 1. Management of behavioral and psychological symptoms of dementia

DRUGS (compared)	PRIMARY OUTCOME	Positive or Negative Impact on Symptom Management	POPULATION	LIMITATIONS
Carbamazepine[2,3]	Brief Psychiatric Rating Scale (BPRS) scores	+	Probable or possible Alzheimer's dementia or vascular dementia, age ≥60, agitation ≥2 weeks with BPRS score ≥3 on tension, hostility, uncooperativeness, or excitement items	Small trials (n= 51 and n= 21)
VPA vs. placebo[4,5]	NPI agitation score	-	Moderate-severe AD, meet DMS-IV criteria for AD, MMSE < 15, and NPI > 8	Small trial (n =14)
	Development of a score of ≥3 NPI items assessing delusions, hallucinations and agitation for 2 weeks	-	Possible or probable AD by the NINCDS-ADRDA criteria, age >54, MMSE 12-20 and NPI < 1 on items assessing delusions, hallucinations or agitation	More VPA patients d/c tx due to adverse events
Topiramate vs. risperidone[6]	Improvement in NPI parts 1 and 2 and the CMAI	=	Mild-moderate AD; MMSE 10-26, compliant of behavioral disturbances and NPI ≥1 in items assessing delusions, hallucinations, agitation and aggression, and irritability and lability	Small study (n=48); no placebo comparator; mixed study population with psychosis and behavioral disturbances; only used MMSE to assess cognitive changes; patients not on concomitant drugs
Oxcarbazepine vs. placebo[7]	Change in agitation and aggression subscore of NPI-NH	=	Moderate-severe AD; MMSE 0-20, hx of agitation or aggression for ≥1 week, ≥6 on NPI-NH subscale for agitation and aggression, had been in NH for ≥4 weeks	Poor statistical power may have lead to the inability to prove OXC was efficacious
Gabapentin[8]	Treating aggressive behavior	+	Vascular or mixed dementia	Case series report of 7 patients
Lamotrigine[9,10]	Verbal and physical aggression	+	Frontal lobe dementia	Case report of 1 patient
	Improvements on Young Mania Rating Scale (YMRS)	+	Dementia, manic-like symptoms and agitation	Case series report of 5 patients
Levetiracetam[11,12]	NPI and YMRS	+	Community-dwelling AD Moderate AD with manic features presents for around 11 months	Two small, open-labeled trials with < 20 patients

REFERENCES

1. Schneider LS, Tariot PN, Dagerman KS, Davis SM, Hsiao JK, Ismail MS, et al. Effectiveness of atypical antipsychotic drugs in patients with Alzheimer's disease. N Engl J Med. 2006;355(15):1525-38. DOI: 10.1056/NEJMoa061240. PubMed PMID: 17035647.
2. Tariot PN, Erb R, Podgorski CA, Cox C, Patel S, Jakimovich L, et al. Efficacy and tolerability of carbamazepine for agitation and aggression in dementia. Am J Psychiatry. 1998;155(1):54-61. PubMed PMID: 9433339.
3. Olin JT, Fox LS, Pawluczyk S, Taggart NA, Schneider LS. A pilot randomized trial of carbamazepine for behavioral symptoms in treatment-resistant outpatients with Alzheimer disease. Am J Geriatr Psychiatry. 2001;9(4):400-5. PubMed PMID: 11739066.
4. Herrmann N, Lanctôt KL, Rothenburg LS, Eryavec G. A placebo-controlled trial of valproate for agitation and aggression in Alzheimer's disease. Dement Geriatr Cogn Disord. 2007;23(2):116-9. DOI: 10.1159/000097757. PubMed PMID: 17148938.
5. Tariot PN, Schneider LS, Cummings J, Thomas RG, Raman R, Jakimovich LJ, et al. Chronic divalproex sodium to attenuate agitation and clinical progression of Alzheimer disease. Arch Gen Psychiatry. 2011;68(8):853-61. DOI: 10.1001/archgenpsychiatry.2011.72. PubMed PMID: 21810649.
6. Mowla A, Pani A. Comparison of topiramate and risperidone for the treatment of behavioral disturbances of patients with Alzheimer disease: a double-blind, randomized clinical trial. Journal of Clinical Psychopharmacology. 2010;30(1):40-3. DOI: 10.1097/JCP.0b013e3181ca0c59. PubMed PMID: 20075646.
7. Sommer OH, Aga O, Cvancarova M, Olsen IC, Selbaek G, Engedal K. Effect of oxcarbazepine in the treatment of agitation and aggression in severe dementia. Dement Geriatr Cogn Disord. 2009;27(2):155-63. DOI: 10.1159/000199236. PubMed PMID: 19182483.
8. Cooney C, Murphy S, Tessema H, Freyne A. Use of Low-Dose Gabapentin for Aggressive Behavior in Vascular and Mixed Vascular/Alzheimer Dementia. J Neuropsychiatry Clin Neurosci. 2013;25(2):120. DOI: 10.1176/appi.neuropsych.12050115. PubMed PMID: 23686029.
9. DEVARAJAN S. Aggression in Dementia With Lamotrigine Treatment. American Journal of Psychiatry. 2000;157(7):1178- 1178. DOI: 10.1176/appi.ajp.157.7.1178.
10. Ng B, Camacho A, Bardwell W, Sewell DD.Lamotrigine for agitation in older patients with dementia. Int Psychogeriatr 2009;21:207-8.
11. WEINER MYRONF, WOMACK KYLEB, MARTIN-COOK KRISTIN, SVETLIK DORISA, HYNAN LINDAS. Levetiracetam for agitated Alzheimer's disease patients. Int. Psychogeriatr. 2005;17(2):327- 328. DOI: 10.1017/S1041610205212061.
12. Kyomen HH, Whitfield TH, Baldessarini RJ. Levetiracetam for manic behavior in hospitalized geriatric patients with dementia of the Alzheimer's type. Journal of Clinical Psychopharmacology. 2007;27(4):408-10. DOI: 10.1097/01.jcp.0000264996.08901.3c. PubMed PMID: 17632234.

How to cite this editor-reviewed article
Goga JK. Toolbox: Management of behavioral and psychological symptoms of dementia. Ment Health Clin [Internet]. 2014;4(4):164-5. Available from: http://dx.doi.org/10.9740/mhc.n204535