Table 1 Behavioral data (accuracy and response time) for healthy controls and a MCI patients with different APOE ε4 status.

Condition	Stimulus	HC		aMCI	
		APOE ε4 - (n = 25)	APOE ε4 + (n = 18)	APOE ε4 - (n = 27)	APOE ε4 + (n = 12)
Accuracy					
0-back	Non-Target	0.95 (0.04)	0.91 (0.07)	0.90 (0.08)[a]	0.86 (0.13)
	Target	0.88 (0.11)	0.83 (0.08)	0.78 (0.18)	0.72 (0.14)[b]
1-back	Non-Target	0.82 (0.10)	0.77 (0.09)	0.74 (0.14)[a]	0.70 (0.20)
	Target	0.83 (0.10)	0.78 (0.09)	0.74 (0.18)	0.60 (0.18)[b]
Response time					
0-back	Non-Target	640.96 (117.98)	645.22 (58.44)	663.57 (119.89)	768.61 (206.29)[b]
	Target	682.02 (118.39)	699.71 (93.11)	713.53 (92.59)	787.60 (172.46)[b]
1-back	Non-Target	643.33 (122.62)	665.64 (62.34)	787.74 (169.42)	838.15 (197.73)[b]
	Target	759.40 (158.11)	817.06 (107.08)	941.52 (187.56)	988.89 (180.22)[b]

Data are presented as mean ± standard deviation (SD). aMCI: amnestic mild cognitive impairement; APOE: apoliprotein E; HC: healthy controls.
[a]Post-hoc tests by Bonferroni's analysis further revealed the source of ANCOVA difference ($P < 0.05$, HC-APOE ε4−vs. aMCI-APOE ε4−).
[b]Post-hoc tests by Bonferroni's analysis further revealed the source of ANCOVA difference ($P < 0.05$, HC-APOE ε4+vs. aMCI-APOE ε4+).

Table 2 ERP data (P300 amplitude) for healthy controls and aMCI patients with different APOE ε4 status.

Task	site	HC		aMCI	
		APOE ε4 - (n = 25)	APOE ε4 + (n = 18)	APOE ε4 - (n = 27)	APOE ε4 + (n = 12)
0-back	CP1	3.69 (2.07)	3.23 (0.42)	3.16 (3.00)	2.44 (1.62)
	CPz	4.11 (1.63)	3.17 (0.68)	3.03 (1.82)[c]	2.45 (1.61)
	CP2	3.23 (1.69)	3.16 (0.87)	2.97 (1.64)	2.35 (1.66)
	P1	3.84 (2.37)	3.54 (1.01)	3.22 (1.80)	2.03 (1.78)[b,d]
	Pz	4.42 (2.25)	3.50 (0.91)	3.31 (1.77)	2.59 (2.56)
	P2	4.89 (2.02)	3.11 (1.00)[a]	3.04 (2.10)[c]	2.34 (1.96)
1-back	CP1	3.61 (2.14)	3.34 (0.65)	2.98 (3.38)	2.42 (1.59)
	CPz	4.63 (2.00)	3.21 (1.21)[a]	2.62 (1.80)[c]	2.53 (1.78)
	CP2	3.93 (1.92)	3.60 (1.12)	3.34 (2.07)	2.31 (1.56)[b,d]
	P1	4.49 (2.58)	3.24 (1.07)	3.00 (1.93)[c]	2.49 (2.10)
	Pz	5.11 (2.34)	3.43 (0.93)	3.23 (1.89)	2.54 (1.39)
	P2	4.52 (2.34)	3.71 (1.26)	3.53 (2.28)[c]	2.54 (1.74)[d]

Data are presented as mean ± standard deviation (SD); aMCI: amnestic mild cognitive impairement; APOE: apoliprotein E; HC: healthy controls.
[a]Post-hoc tests by Bonferroni's analysis further revealed the source of ANCOVA difference ($P < 0.05$, HC-APOE ε4− vs. HC-APOE ε4+).
[b] Post-hoc tests by Bonferroni's analysis further revealed the source of ANCOVA difference ($P < 0.05$, aMCI-APOE ε4− vs. aMCI-APOE ε4+).
[c]Post-hoc tests by Bonferroni's analysis further revealed the source of ANCOVA difference ($P < 0.05$, aMCI-APOE ε4− vs. HC-APOE ε4−).
[d]Post-hoc tests by Bonferroni's analysis further revealed the source of ANCOVA difference ($P < 0.05$, aMCI-APOE ε4+ vs. HC-APOE ε4+).

Disclosure of interest The author has not supplied his/her declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2017.01.2064

EW0195

Charles Bonnet Syndrome (CBS): Successful treatment of visual hallucinations due to vision loss with agomelatine in three cases

H.C. Hsu[1,*], Y.S. Huang[2], W.X. Fan[3], T.C. Chen[4]
[1] *Dalin Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Department of Psychiatry, Chia-yi county, Taiwan ROC*
[2] *Dalin Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Department of Neurology, Chia-yi county, Taiwan ROC*
[3] *Dalin Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Department of Ophthalmology, Chia-yi county, Taiwan ROC*
[4] *Dalin Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Department of Metabolism and Endocrinology, Chia-yi county, Taiwan ROC*
* *Corresponding author.*

Background CBS becomes more prevalent as the population ages. CBS is characterized by the triad of impairment of vision, complex visual hallucinations with insight, mentally normal people. Although visual hallucinations in the elderly are often associated with dementia with Lewy body, Alzheimer's disease and delirium, they are excluded from the diagnosis of typical CBS. Here, we describe three typical CBS patients whose visual hallucinations developed after bilateral severe visual impairment due to diabetic retinopathy. The effectiveness of agomelatine adds to evidence implicating serotonergic and melatoninergic pathways in the pathogenesis of visual hallucinations.
Case report The average age of these three patients (2 males and 1 female) is 71. Except for the visual hallucinations, all patients showed no psychiatric symptoms or cognitive decline or neurological focal signs. They were frequently upset by the fact of hallucinating, fearing that they are losing their minds. They lived in fear of impending insanity, guilty feeling, unhappy mood, insomnia. The frequency of visual hallucinations stopped with agomelatine 25 mg/day for 3 weeks in these cases.
Discussion To our knowledge, this is the first report describing the effectiveness of agomelatine in treating typical CBS patients and indicates that agomelatine is an safer option for the treatment of CBS, especially in the elderly, diabetic population. Therapeutic options for CBS still remain poor and of uncertain benefit for the individual patient. CBS has a high prevalence rate (0.4%–30%) among the visually impaired. Clinicians must ask elderly people with visual impairment whether they have hallucinations. Firm reassurance that the syndrome is not related to mental illness is a major relief to an elderly person burdened already with failing vision.
Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2017.01.2065

EW0196

White matter hyperintensities as a new predictor of driving cessation in the elderly

K.Y. Lim[1,*], S.J. Son[2], M. Jang[2], C.H. Hong[2]
[1] *Ajou University School of Medicine, Department of Psychiatry, Suwon, Republic of Korea*
[2] *Ajou University School of Medicine, Psychiatry, Suwon, Republic of Korea*
* *Corresponding author.*

Background/aims Motor, perceptual, and cognitive functions affect driving competence. White matter hyperintensities (WMH) changes on brain MRI are associated structural brain changes along with cognitive and motor performance. The aim of this study was to investigate the association between WMH and driving ability in the elderly.
Methods Participants ($n = 540$) were drawn from a nationwide, multicenter, hospital-based, longitudinal cohort study. Each participant underwent clinical evaluations, neuropsychological tests, and interview for caregiver including driving capacity, which was categorized as 'now driving', and 'driving cessation (driving before, not now)'. A total 540 participants were divided into three groups (389 mild, 116 moderate, and 35 severe) depending on the degree of WMH. The same evaluations of them were followed after each year. The statistical analyses were performed using χ^2 test, an analysis of variance (ANOVA), structured equation model (SEM), and generalized estimating equation (GEE).
Results In a SEM, greater baseline degree of WMH was directly associated with driving cessation regardless of cognitive and motor dysfunction ($\beta = -0.110$, $P < 0.001$). In GEE models controlling for age, sex, education, cognitive, and motor dysfunction, the more severe changes of the degree of WMH was associated with the