

been still unclear. In this study, using the methodology of quantitative assessment of CSF volumes in idiopathic normal pressure hydrocephalus (iNPH), we assessed longitudinal changes in CSF volumes in AD patients.

Methods: The subjects were the patients with mild cognitive impairment and dementia due to AD who visited Osaka University Hospital from November 2009 to October 2018. We excluded the patients with gait disturbances and MRI findings such as Disproportionately enlarged subarachnoid-space hydrocephalus (DESH), which was the suggestive finding of iNPH. For each subject, MRI was performed in the first visit and 1 year later. We quantitatively measured CSF volumes in DESH-related regions, such as ventricle systems (VS), Sylvian fissures (SF), and sulci at high convexity and the midline (SHM), using an automatic brain volumetric software program (AVSIS) (Ishii et al. 2006, 2013). The ratio of each regional volume to the intracranial volume was calculated and we compared these parameters between two visits.

Results: We enrolled 98 patients with AD (mean (SD) age = 76.0 (5.7)). Wilcoxon signed rank test revealed that, while the ratios of CSF volumes in VS and SF significantly increased during the one-year observation (VS: 4.01 (1.05) % vs 4.14 (1.09) %, $p < 0.001$; SF: 1.40 (0.21) % vs 1.42 (0.22) %, $p = 0.007$), those in SHM significantly decreased (4.30 (0.70) % vs 4.23 (0.69) %, $p < 0.001$). The change ratio of relative volumes in VS was correlated with those in SF and SHM ($r = 0.451$, $p < 0.001$; $r = -0.350$, $p < 0.001$).

Conclusion: In patients with AD, the CSF volumes in VS and SF increased while CSF volumes in SHM decreased. This trend of the longitudinal change was similar to the change in the patients with iNPH. The finding of this study indicates that, in the patients with AD, CSF dynamics may be impaired like the patients with iNPH.

Keywords: cerebrospinal fluid (CSF), Disproportionately enlarged subarachnoid-space hydrocephalus (DESH), Alzheimer's disease

P188: Engagement and refusals of care: a naturalistic observation study of personal care interactions between caregivers and people with advanced dementia

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Objective: Personal care interactions can provide important opportunities for caregivers to engage with a person living with advanced dementia but may also prove to be a difficult experience; why this so is not completely understood. We aimed to examine the person's engagement and refusals of care in personal care interactions and identify both successful and difficult interpersonal dynamics to enable learning from each setting to inform educational resources.

Methods: One-off video-recorded observations of personal care interactions between caregivers (care-home staff or family carers) and people with advanced dementia in the UK (total observation time 03:01:52). Observations were analysed using the Menoh Park Engagement Scale (MPES) (Camp et al., 2015) and the Resistance-to-Care scale (RTC-DAT) (Mahoney, 2015) to score 5-minute video sections, and inductively with qualitative content analysis.

Results: Active engagement of people with dementia was observed in 66% of observations. Refusals of care were present in 32% of observation time. Generally, caregivers emanated a nurturing attentiveness and people with dementia were focused and engaged throughout care activities. Rare difficult interactional components were characterised by the person with dementia appearing to show uneasiness and caregivers being flustered and

uncertain. However, caregivers from both family and care-home settings were predominantly attuned to the person and skilled in effortlessly supporting them through the care activity.

Conclusions: Findings provide real-world empirical evidence which reenergises the concept of person-centredness in dementia care. Personal care activities typically created opportunities of engagement, rather than sites of conflict, for people with advanced dementia. The findings provide much needed insight into ways to improve care experiences for people with advanced dementia. Appropriate training/guidance for care-home staff and family carers could support more engaged and pleasurable care experiences for people with dementia.

References

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P193: Participation of faith-based organizations in the secular health- and welfare- care system for the older people in Japan: evidence and challenges

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Objective: Due to longevity, universal health coverage, declining population, and a stable society, it is estimated that the number of people with dementia will reach 10 million by the mid-21st century, accounting for 10% of the total population in Japan. To move toward a dementia-friendly community, it is essential to develop innovative and effective dementia care. However, human and economic resources are limited. Therefore, we focused on traditional Buddhist denominations that have organizations, educational systems, human resources, networks, and care venues. The fundamental question of this study is: Japanese Buddhism has created basis for mindfulness-based cognitive therapy, but is it also innovative in the care of older people?

Methods: We looked for papers that 1) were written in a medical rather than a religious context, 2) were written in English, and 3) dealt with the care of the older people in Japan.

Results: 1) Institutional care workers' need for Buddhist priests for helping anxiety of older residents was reported. 2) Effectiveness of community cafés for the family caregivers of people with dementia in the Buddhist temples were reported. 3) Potentials of monthly visit to bereaved families, Buddhist priests' tradition, as the outreach of grief care was suggested. 4) Care workers' own ideas about death after working in the landscape of dying and death was reported by the interview which used Buddhist priests as the interviewers.

Conclusion: Participation of Buddhist priests as 1) spiritual cares for the residents in the institutions, 2) carers for the family carers in the community, 3) carers of the bereaved families in the outreach activity, and 4) carers for the care workers, were reported. However, robust evidence was not enough. From the standpoint of Japanese clinicians, there are too few papers compared to the actual contributions. More studies should be done which might also work as external monitoring. Traditional Buddhism in Japan has a closed membership system which is based on the family gravesite system and is generally not enthusiastic about propagation, which would also be compatible with a secular care system.