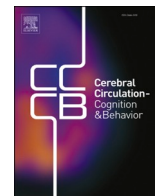




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VasCog 2021 virtual report and abstracts

Due to the global COVID-19 pandemic the VasCog 2021 International Conference was again held as a video conference over two days, 8–9 September 2021. The Newcastle hosts would have welcomed many ‘VasCog’ colleagues and friends to meet and network face-to-face in 2020 or 2021 but the historical opportune in-person privilege was not to be. Not coincidentally, it was just over 20 years in Newcastle that discussions began on the idea of banding together clinical and basic science researchers interested in all things vascular. That was at the exciting symposium on vascular factors in dementia, especially Alzheimer’s disease held in 1999 at the attractive golf resort, Slaley Hall in Northumberland, situated in the outskirts of Newcastle. The symposium was attended by dementia researchers from all over the world including investigators of the LADIS consortium (Kalaria RN, Ince P. (eds), *Vascular Factors in Alzheimer’s Disease, Ann NY Acad Sci, Vol 903, 2000*). This was followed by another similar symposium focusing on vascular factors in Alzheimer’s Disease in particular in Kyoto in 2002 (De la Torre JC, Kalaria RN, Nakajima K, Nagata K. (eds), *Alzheimer’s Disease: Vascular etiology and Pathology, Ann NY Acad Sci, Vol 977, 2002*). Therefore, two decades seemed poignant for the 2020/2021 VasCog hosts to look forward to reminiscing about those small beginnings in addition to catching up with colleagues in-person on recent advances in vascular cognitive impairment (VCI) and dementia. Subsequently, the VasCog Society (International Society for Vascular, Behavioural and Cognitive Disorders) was born and registered in Sweden in 2003, with the first conference of the Society held in September in Gothenburg. Professors Ingmar Skoog and Anders Wallin (Gothenburg University) were hosts of that important beginning for the VasCog Society in 2003. The scene was set for an unique format involving mostly short talks delivered by older and younger colleagues alike, lots of discussion time and the hallmark debates of VasCog congresses. The next VasCog conference is now expected to return to Gothenburg in September 2023 after exactly 20 years. Since Gothenburg, there have been 9 other VasCog conferences in Florence (2005), San Antonio (2007), Singapore (2009), Lille (2011), Toronto (2013), Tokyo (2015), Amsterdam (2016), Hong Kong (2018) and Newcastle virtual (2020/2021).

Adopting the conference theme ‘Healthy Hearts for Healthy Brains,’ the VasCog 2021 virtual programme comprised cutting-edge science delivered in 6 short plenary lectures, 4 symposia, and 1 early career researcher (ECR), 2 oral communication and 2 poster blitz sessions on various themes including vascular risk factors and biomarkers for small vessel diseases (SVD), heart rate variability, cognition and stroke, genetics of SVD, neuroinflammation, blood-brain barrier, VCI and global burden of dementia. The two-day intensive live programme involving over 100 seasoned speakers and PIs, ECRs and postgraduate students. In keeping with the VasCog tradition short punchy talks and sessions

worked very well. Smooth running was only possible because the speakers had sent their PowerPoint presentations well in advance to the audiovisual team. These were accompanied by several new science symposia and virtual poster sessions with all poster presenters giving a brief oral presentation summarising their poster. There was a particular focus on encouraging ECRs to present, with dedicated slots for ECRs in the programme and an excellent symposium organised by ECRs on the future of VCI research. The full programme and most recordings of the sessions were posted on the VasCog website (www.vas-cog.com).

The key findings from the meeting included the rapid progress being made in the GWAS studies in stroke and more recently VCI, the importance of blood brain barrier dysfunction and inflammation as a potential mechanism for VCI and both the challenges and potential benefits in the arena of prevention of VCI. Heart rate variability was highlighted as a potential marker and possible cause of VCI. The importance of anxiety and apathy as non-cognitive manifestations of VCI was also discussed. The field of biomarkers for VCI is expanding, as well as potential new blood and CSF biomarkers that of gait was highlighted. Clinical VCI remains an area of much unmet need with unfortunately no proven symptomatic or disease modifying treatments, but ongoing studies due to report in the next few years may alter the status. The recent US Federal Drug Agency conditional approval of the new disease-modifying treatment for Alzheimer’s disease, Aducanumab was also discussed. The short session led by Anders Wallin, Editor-in-Chief of the Society’s journal *Cerebral Circulation Cognition and Behaviour* concluded that caution was necessary in that it was not a licensed, safe or appropriate treatment for amyloid angiopathy. Views of leading experts and Society members on how it might impact on vascular cognitive disorders will be published in an editorial in the journal.

There were many excellent oral and poster presentations on new vascular science covering areas as diverse as novel pathophysiological mechanisms through to biomarkers, treatment and improving clinical care. Abstracts of the accepted oral and poster presentations are published in this special supplement of the journal.

Declaration of Competing Interest

The authors declare no competing interests.

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Jobson for helping with the logistics, registration, website and audio-visual expertise. Members of the Executive Committee of the VasCog Society are also thanked for their inputs to the programme and vetting the submitted abstracts.

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