

In the news

HOT TOPICS FROM AAN 2016

The 68th American Academy of Neurology Annual Meeting (AAN 2016) was held in Vancouver, Canada from 15th to 21st April 2016. The meeting provided a platform for the reporting of a number of promising new developments in neurology.

AAN 2016 saw the presentation of updated practice guidelines on the use of botulinum neurotoxin for the treatment of blepharospasm, cervical dystonia, adult spasticity and headache. The update takes into account research performed in these disorders since 2008, when the original AAN guidelines were published.

The new AAN recommendations include advice that botulinum neurotoxin can be considered in all four conditions, and include more detail than the previous guidelines about the benefits of different toxin preparations — onabotulinum toxin A, abobotulinum toxin A, incobotulinum toxin A and rimabotulinum toxin A. The four preparations were associated with different levels of benefit in each of the four disorders. Of note, the guideline update introduces the recommendation of botulinum toxin for headache; the 2008 guidelines were inconclusive about use of the toxin in this context.

In other news from the AAN meeting, promising results were presented from studies of a new therapeutic approach to Huntington disease in humans. The new agent, called IONIS-HTTRx, is an antisense oligomer that blocks translation of huntingtin (HTT) mRNA. Studies in mice and nonhuman primates have shown that IONIS-HTTRx reduces HTT levels and leads to phenotypic improvements, and phase I trials in humans have shown the treatment to be safe and tolerable.

The benefits of ocrelizumab in relapsing–remitting multiple sclerosis (MS) were also underlined, following the positive results of the OPERA I and OPERA II trials presented at theECTRIMS Congress in 2015. The new analysis showed that 48% of patients who received ocrelizumab achieved ‘no evidence of disease activity’ (NEDA), almost twice the proportion of patients who achieved NEDA with IFN- β treatment.

Also in MS, another presented abstract suggested that clemastine fumarate, a commonly used over-the-counter antihistamine, can reverse demyelination of the optic nerve. In patients with delayed transmission in at least one eye, administration of the drug over 3 months accelerated transmission by up to 2 ms. According to the lead author Ari Green, “this study is the first time a drug has been shown to possibly reverse the damage done by MS.

Other highlights of AAN 2016 included two studies that focused on traumatic brain injury in sports. The first is one of the largest studies to date of brain injury in retired National Football League (NFL) players. Diffusion tensor imaging revealed reduced brain connectivity in 17 of 40 players studied, and conventional MRI detected traumatic axonal damage in 12 players. The second study determined that transcranial Doppler ultrasound could distinguish patients with concussion from healthy individuals with a sensitivity of 71% and a specificity of 83%, indicating that this technique could be translated into sideline assessment of sports-related concussion.

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