
P-41 Prescribing Sodium Bicarbonate for Acute Vertigo Care: Case-Based Survey.

Kenji Numata ^a [*Other Doctors*], Kobayashi Daiki ^b, Takashi Shiga ^c, Hiraku Funakoshi ^a, Tetsuya Inoue ^a, Eiji Hiraoka ^a

^aTokyo Bay Urayasu Ichikawa Medical Center, ^b St.Luke's International Hospital,

^c International University of Health and Welfare, Mita Hospital

Background: Intravenous sodium bicarbonate is widely used for acute vertigo care in Japan. However, research about the efficacy of sodium bicarbonate was limited. We investigated the difference of preference to use sodium bicarbonate among otolaryngologist (Ear, Nose and Throat (ENT) physicians), emergency physician (EM), internal medicine (IM).

Methods: This was a multi-center case-based survey from 2016 to 2017. We invited physicians with 3 years or more carriers from six teaching hospitals in Japan. There was no exclusion criterion. We developed four contextually validated scenarios; benign paroxysmal positional vertigo (BPPV), vestibular neuritis, Meniere disease, and nonspecific vertigo. Based on the scenario, we asked physicians preference about examination and treatment, including sodium bicarbonate, for acute vertigo by multiple choice questions. The information about physician's background and hospital were also obtained. Our primary outcomes were the difference of physician's preference between departments. Fisher exact test was applied to the analyses.

Results: 151 physicians were included, where 48 were EM, 36 were IM, and 67 were ENT. Eighteen questions (Two back ground related, five examinations related, ten treatments related) were statistically different between departments. Physicians were willing to prescribe sodium bicarbonate for BPPV (Total: 56.3%, EM: 27.1%, IM: 25.0%, ENT: 58.2%, $p<0.01$), vestibular neuritis (Total: 56.3, EM: 27.1%, IM: 27.8%, ENT: 91.0%, $p<0.01$), Meniere disease (Total: 58.3, EM: 33.3%, IM: 30.6%, ENT: 91.0%, $p<0.01$), and nonspecific vertigo (Total: 50.3%, EM: 33.3%, IM: 30.6%, ENT: 91.4%, $p<0.01$).

Conclusion: To detect efficacy of sodium bicarbonate, we need further research in the clinical settings.