2312 CASE REPORT: AN UNUSUAL HEADACHE ASSOCIATED WITH DYSPHONIA, RESPONDING TO A CGRP INHIBITOR

[1]Jasmine Ashhurst*, [2]Rami Haddad. *[1]St George Hospital, Sydney, NSW, Australia; [2]Orange Health Service, Orange, NSW, Australia*

10.1136/bmjno-2022-ANZAN.94

We present a rare case of headaches associated with dysphonia in a 70 year old female (BM) that proved resistant to various migraine medications until the introduction of fremanezumab; a calcitonin gene-related peptide (CGRP) monoclonal antibody.

BM's atypical headaches began suddenly 20 years ago as a throbbing occipital headache radiating to the neck.

Her headaches have been associated with left facial numbness, blurred vision, subjective hearing impairment, and an unusual feature of dysphonia. Over the past year, her acute headache attacks increased in frequency from monthly to > 15 days per month. Dysphonia occurred during her episodes of migraines, sometimes for up to a few days, and was not associated with carotidynia.

MRI/MRA brain showed nonspecific white matter T2 hyperintensities, showed no features of vasculitis. There was no structural cause for her dysphonia.

SPECT-CT showed mild degenerative changes and facet joint arthritis on the right (however BM had left sided symptoms).

Bloods: borderline ANA, negative ANCA/anti-dsDNA, negative AChR-antibodies/anti-Musk antibodies.

The headaches failed to have a satisfactory response to pizotifen, propranolol, sodium valproate, verapamil, baclofen, amitriptyline, topiramate, duloxetine, opioids and occipital nerve block. She could not tolerate high dose pregabalin. BM has been commenced on fremanezumab to good effect. She continues to have occasional episodes of dysphonia though no longer suffers from any headaches.

Migraines associated with dysphonia are an underrecognised clinical presentation that has been reported in medical literature.[1] Our case demonstrates that there continue to be rarer associations found with the common neurological condition of migraine.

REFERENCE

1. Ordás CM, Torres-Gaona G, Pardo-Moreno J, Cuadrado ML. Case report: prolonged dysphonia during migraine attacks. *Headache*. 2017 Mar;**57**(3):497–499. doi: 10.1111/head.13026. Epub 2017 Jan 30. PMID: 28133738.

2313 QUANTITATIVE ANALYSIS OF NECK MUSCLE T2 RELAXATION TIMES IN CERVICAL DYSTONIA

[1,2]Chun Seng Phua, [1,2]Kelly Bertram, [2,3]Meng Law, [1,2]Elspeth Hutton*. *[1]Department of Neurology, Alfred Health, Melbourne, VIC, Australia; [2]Department of Neurosciences, Monash University, Melbourne, VIC, Australia; [3]Department of Radiology, Alfred Health, Melbourne, VIC, Australia*

10.1136/bmjno-2022-ANZAN.95

Objectives T2 relaxation times (T2RT) of muscles increase with physical exercise, however T2RT has not been studied in dystonic muscles with are in a state of constant activity. Major muscles involved in cervical dystonia (CD) include splenius capitis, semispinalis capitis, levator scapulae, sternocleidomastoid and trapezius which are also prime targets for botulinum toxin treatment. This study analysed the T2RTs in key neck muscles in CD, and compared them with normal subjects.

Methods 23 CD subjects underwent MRI and clinical assessment just prior to their next cycle of botulinum toxin treatment. 3 patients were excluded from data analysis due to significant muscle atrophy. Using T2 images, two circular regions of interest (ROIs) were drawn in two mutually exclusive regions within neck muscle fibres at two different levels and the values averaged. ROI values were translated into T2RTs. T2RTs were compared with the Toronto Western Spasmodic Torticollis Rating Scale (TWSTRS) and EMG activity score.

Results CD subjects showed higher T2RTs in different neck muscles compared to normal subjects. T2RTs correlated with TWSTRS scores, but not EMG scores. When clinically separated into simple torticollis and complex CD, there were no significant differences in neck muscle T2RTs.

Conclusion T2RT may be helpful in distinguishing dystonic vs normal neck muscles, allowing more accurate targeting of muscle groups for botulinum toxin treatment. T2RT may be supportive in the diagnosis of cervical dystonia. Future studies could compare qualitative EMG scoring and vs quantitative T2RTs in the identification and assessment of dystonic neck muscles.

2315 12-MONTH EFFECTIVENESS AND TOLERABILITY OF BRIVARACETAM IN THE REAL-WORLD: INTERIM ANALYSIS OF THE INTERNATIONAL, MULTICENTER NON-INTERVENTIONAL EXPERIENCE STUDY

[1]Vicente Villanueva, [2]Wendyl J D'Souza*, [3]Edward Faught, [4]Pavel Klein, [5]Markus Reuber, [6]Felix Rosenow, [7]Javier Salas-Puig, [8]Strzelczyk Adam, [9]Jerzy Szaflarski, [10]Ricchetti-Masterson Kristen, [11]Laloyaux Cédric, [11]Sendersky Veronica, [10]Zhou Sophia, [12]Floricel Florin, [10]Tony Daniels, [13]Steinhoff J Bernhard. *[1]Hospital Universitario y Politécnico La Fe, Valencia, Spain; [2]Medicine – St Vincent's Hospital, The University of Melbourne, Fitzroy, VIC, Australia; [3]Emory Epilepsy Center, Atlanta, Georgia, USA; [4]Mid-Atlantic Epilepsy and Sleep Center, Bethesda, MD, USA; [5]The University of Sheffield, Sheffield, South Yorkshire, UK; [6]Epilepsy Center Rhine-Main, Center of Neurology and Neurosurgery, Frankfurt, Germany; [7]Universitari Vall d'Hebron, Barcelona, Spain; [8]Epilepsy Center Frankfurt Rhine-Main, Center of Neurology and Neurosurgery, Frankfurt, Germany; [9]UAB Epilepsy Center, Birmingham, AL, USA; [10]UCB Pharma, Morrisville, NC, USA; [11]UCB Pharma, Brussels, Belgium; [12]UCB Pharma, Monheim am Rhein, Germany; [13]Kork Epilepsy Center, Kehl-Kork, Germany*

10.1136/bmjno-2022-ANZAN.96

Objectives To evaluate effectiveness and tolerability of brivaracetam (BRV) in routine clinical practice in a large, multicenter, international patient population (North America/Europe/Australia).

Methods Retrospective, pooled cohort study (EPD332/EXPERIENCE) of patients initiating BRV. Seizure-freedom and incidence of treatment-emergent adverse events (TEAEs) assessed at 3/6/12 months.

Results Interim analysis including 1,910 patients from Spain/Germany/Australia/United Kingdom/United States (851/503/301/130/125); 52% female; median 17 years since diagnosis (N=1,819); 89.5%/10.6% had focal-onset/generalized-onset seizures at baseline (N=1,855). Most common known etiology (≥10%) was malformation of cortical development (283/1,883 [15.0%]). Most common comorbid conditions (≥10%) were psychiatric (680/1,843 [36.9%]), cognitive/