Chapter 2
Classification Systems for Trigeminal Neuralgia and Quantification of Facial Pain

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ABSTRACT

Trigeminal neuralgia is a rare syndrome classically described as brief paroxysms of severe, lancinating facial pain along a unilateral trigeminal nerve distribution. Numerous clinical presentations of trigeminal neuralgia exist, with various distinct etiologies. Several classification schemes have been designed for clinical and research

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purposes. However, varying terminology and inconsistent utilization of these systems can lead to diagnostic confusion and ungeneralizable research findings. Similarly, multiple pain scales have been used for trigeminal neuralgia with differing degrees of granularity, validity, and reliability. This chapter provides an overview of the commonly used classification systems and pain scales in the context of their evolution and utilization. Furthermore, the authors provide recommendations for application of these systems to clinical and research practice.

INTRODUCTION

Trigeminal neuralgia (TN) is a rare type of facial pain, occurring in approximately 4-5 in 100,000 people (Katusic, Williams, Beard, Bergstralh, & Kurland, 1991; Khan, Nishi, Hassan, Islam, & Gan, 2017), and typically involves brief paroxysms of intense, shock-like pain along the trigeminal nerve distribution that can be triggered by benign stimuli. The symptoms are almost always unilateral, and may coincide with autonomic symptoms such as lacrimation or eye redness.

The etiology of TN is most commonly due to compression of the trigeminal nerve at the root entry zone to the pons (Love & Coakham, 2001). At least 80 percent of cases involve compression by a blood vessel (Hamlyn, 1997; Hilton, Love, Gradidge, & Coakham, 1994), mainly by the superior cerebellar artery (Jannetta, 1985). However, a subset of TN may also be caused by masses including cerebellopontine angle tumors, aneurysms, and arteriovenous malformations, or demyelination of the trigeminal nerve nuclei or nerve itself such which can occur with multiple sclerosis (Cheng, Cascino, & Onofrio, 1993; Figueiredo, Brock, De Oliveira, & Prill, 1989; Ildan et al., 1996; Linskey, Jho, & Jannetta, 1994).

BACKGROUND

Several classification systems have been used to distinguish between clinical and etiologic subtypes of trigeminal neuralgia. These systems are used as diagnostic criteria in the evaluation of facial pain, and play a critical role in research seeking to create and compare treatments. Furthermore, clinicians utilize these systems and results from therapeutic trials when selecting treatments for their patients. Therefore, study results, available treatment options, and ultimately, treatments pursued may vary based on which classification system is utilized for diagnosis. Additionally, multiple methods of grading facial pain are used in conjunction with classification systems for research and clinical practice. Therefore, confusion may also arise due to the inconsistent use of pain terminology. This chapter provides an overview of
Best Practices to Promote Patient and Donor Engagement to Care in Living Donor Transplant
Transformative Healthcare Practice through Patient Engagement (pp. 1-28).

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