Disparities in the Diagnosis and Management of Trigeminal Neuralgia

Azam Basheer MD; Kevin Reinard MD; Ellen L. Air MD, PhD; Ghaus M. Malik MD; Jason M. Schwalb MD , FAANS, FACS
Henry Ford Hospital

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Introduction

A number of studies have documented inequalities in care and outcomes for a variety of clinical conditions. We sought to identify potential racial and socioeconomic disparities in the diagnosis and treatment of trigeminal neuralgia (TN) that could serve as areas of focus for future quality improvement initiatives.

Methods

Medical records of patients with an ICD-9 code of 350.1, signifying a diagnosis of TN, in the Henry Ford Medical Group (HFMG) from 2006 to 2012 were reviewed. The authors identified 652 such patients (Figure 1). Clinical and socioeconomic data were retrospectively reviewed on all patients. Analyses were conducted to assess potential racial differences in subspecialty referral patterns and the specific type of treatment modality undertaken by patients with trigeminal neuralgia.

Results

When compared to White patients, Black patients were less likely to undergo percutaneous ablative procedures, stereotactic radiosurgery, or microvascular decompression ($p<0.001$). However, there was no difference in likelihood of Blacks and Whites undergoing a procedure once they had seen a neurosurgeon (67% vs. 70%, respectively; $p = 0.712$). Blacks and Whites were equally likely to be seen by a neurologist or neurosurgeon if they were initially seen either in the ER (38% vs. 37%, $p = 0.686$) or in Internal Medicine (48% vs. 50%, $p = 0.743$). For patients diagnosed after the publication of EFNS-AAN guidelines for medical therapy of TN in 2008 ($n = 293$), fewer than 50% of patients were on medications sanctioned by the guidelines, without statistically significant racial disparities ($p = 0.060$).

Conclusions

In a large retrospective database from one of the nation's largest, comprehensive health systems, there were significant racial disparities in the likelihood of a patient undergoing a procedure for TN. This appeared to stem from a difference in referral patterns from outside that system to our neurologists and neurosurgeons.

Learning Objectives

By the conclusion of this session, participants should be able to:

1) Realize the existing racial disparities that exist among patients suffering from facial pain.

2) Once patients see a neurosurgeon, there was no difference in likelihood of Blacks and Whites undergoing a procedure

3) A good portion of this disparity stems from poor referral patterns that exist in under-served communities

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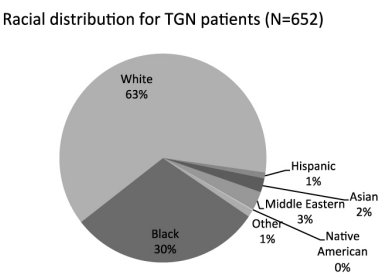
Figure 1



Racial distribution for TGN patients