SEX INEQUALITIES IN HEAD CT SCANNING FOR MINOR AND MILD HEAD INJURIES IN OLDER ADULTS

Tracy Freeze [1], Leanne Skerry [1], Natasha Hanson [1], Elizabeth Van Steeg [2], Richard Louis [2,3] 1 SOAR, Research Services, Horizon Health Network; 2 Horizon Health Network; 3 Trauma NB



Tracy.Freeze@HorizonNB.ca

Introduction

Sex and gender-based inequalities exist in aspects of the healthcare system, whereby female patients typically receive a lower quality of care compared to male patients.

These inequalities may be true for patients with minor and mild head injuries (mHI). Older age is a well-known risk factor for Computed Tomography (CT) scan abnormalities following even mHI.

Researchers have indicated that females' rates of head injuries are increasing and, for patients aged ≥ 65, females may have poorer head injury-related outcomes than men.

Thus, CT scans may be particularly important for older adult female patients with potential mHI.

Objective

To examine the rates of CTs by sex of older adults presenting to an Emergency Department with a potential mHI (GCS = 14 or **15).**

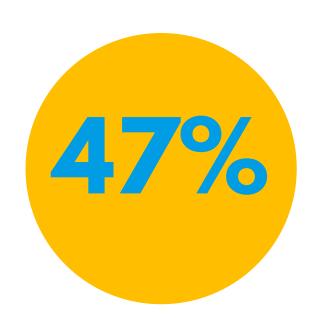
Methods

We conducted a retrospective case review and examined the rates of CTs in patients ≥ 65 years of age who:

- had a presenting complaint that was potentially HI related;
- a GCS of 14 or 15;
- and visited the ED at a tertiary care hospital between January 1, 2017 and December 31, 2018.

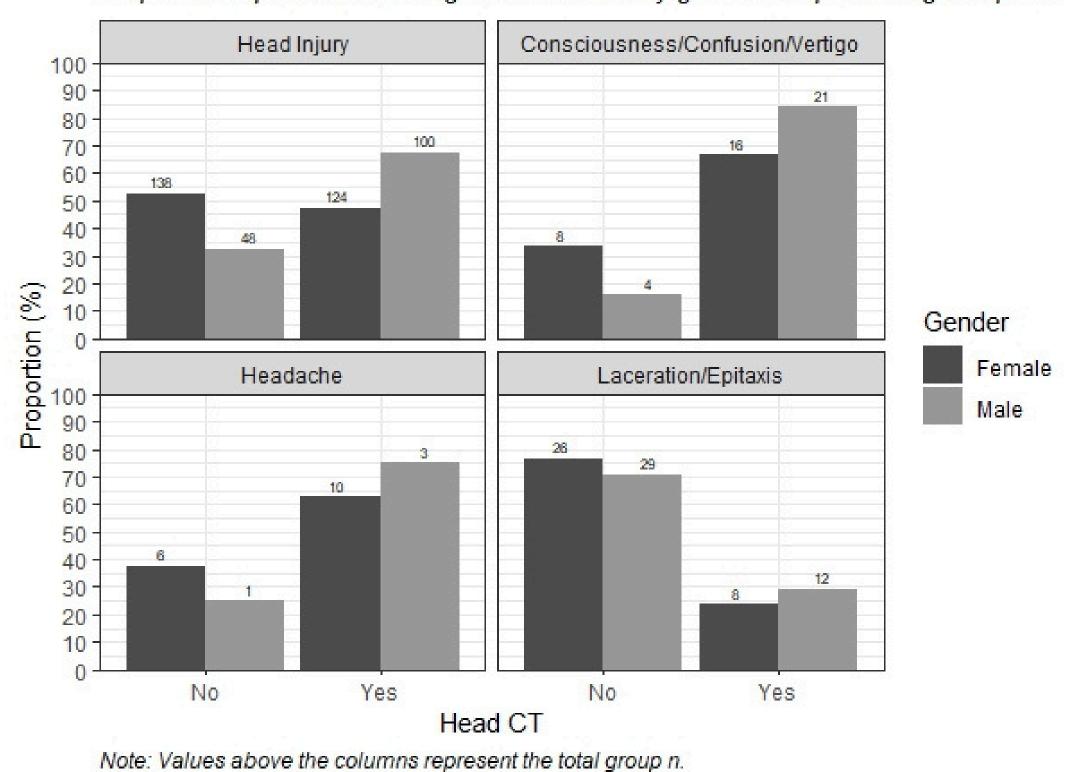
Results

Overall, female patients were less likely than males to receive a head CT Scan.





Proportion of patients receiving head CT Scan by gender and presenting complaint.



Facial and

Major

were the only presenting complaints with relatively equal distribution between the sexes of receiving a CT scan.

Discussion

The sex disparity in head CT scans may result from unintentional cognitive bias derived from a combination of the "male problem", "symptom discounting", and the view of pain in females as "emotional".

Though retrospective and limited by the difficulty retrieving data from patient records, these are important issues to research as the Canadian population is aging and equitable proactive diagnoses can potentially forestall head injury health complications and reduce reinjury rates.



