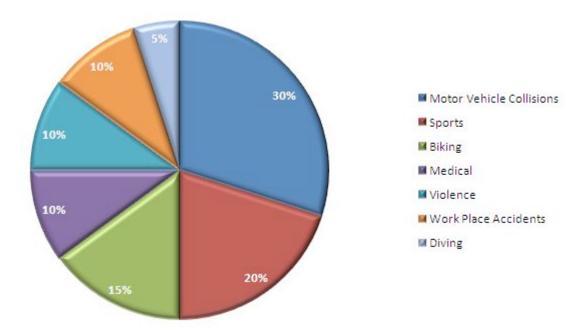
# **Post-Traumatic Headache**

### Headaches due to a Fall, or Injury

### Introduction

According to the Brain Injury Association of Waterloo-Wellington, an estimated 1.3 million Canadians are living with a Traumatic Brain Injury (TBI). They have a profound impact on the lives of patients and their families. Headache is the most common complaint and it can occur after mild, moderate or severe injury. Post-Traumatic Headache (PTH) is a side effect of a TBI and is generally caused from motor-vehicle accidents, assaults, a sports collision, falling or accidentally hitting your head.<sup>2</sup>

## **Causes of Traumatic Brain Injury**



<sup>\*</sup> above chart was reprinted with permission from the Brain Injury Association of Waterloo-Wellington

#### What is PTH?

Post-Traumatic Headache (PTH) is defined by the International Headache Society as a headache developing within seven days of trauma or injury.<sup>3</sup> There are many forms of PTH but they generally have migraine-like features (nausea or vomiting; light or sound sensitivity). Poor concentration, memory problems, dizziness, vertigo, irritability, sleep disturbances, are common complaints.

PTH is often experienced on both sides of the head, but it can be one-sided. The location of PTH can vary.<sup>4</sup>

PTH is similar to other headache disorders in that it has both acute and chronic forms.<sup>5</sup> To qualify as a Chronic Post-Traumatic Headache, the headache must persist for more than three months. The International Headache Society now classifies the chronic version of post-traumatic headache, as "persistent headache attributed to traumatic injury to the head." <sup>6</sup>

Imaging tests like a CT scan or an MRI of the brain are usually normal.

Living with either Acute, or the Chronic form of PTH can be a real challenge. According to Dr. Silberstein the life of a chronic post-traumatic headache sufferer can become truly miserable due to daily headaches, cognitive problems, legal difficulties (if a claim exists), and a dismissal by many people as to the headaches authenticity.

Interestingly, several researchers have reported that post-traumatic headache is more common after mild TBI than after severe TBI.<sup>7</sup>

As suggested by a published article from Dr. Christine Lay from Toronto "some Post-Traumatic Headaches can have features of Hemicrania Continua."<sup>8</sup>

Headaches After Head Injuries is a previous term to designate post-traumatic headache. Other name variations include: Post-Traumatic Syndrome and Post-Concussional Syndrome.

### **Sports-Related Concussions & Injuries**

Ninety percent of athletes with a sports-related concussion report having headaches after the initial injury. Athletes - in particular football players and hockey players - can experience a concussion as a result of a blow, or very rapid movement of the head.

**Over the last 5 years** the number of emergency department (ED) visits for sport-related brain injuries in Ontario and Alberta has increased by 46%. <sup>10</sup>

### **Treatment**

There are no high quality studies on the pharmacological treatment of PTH. The common recommendation is to treat the headache according to symptoms. If the headache resembles migraine, then migraine drugs are used. Attacks may be treated with anti-inflammatories or triptans (if symptoms are migrainous). However, if the headache persists and remains moderate to severe, adding in preventative medication should be considered—especially to avoid medication-overuse headache (over-using pain medicines). <sup>11</sup>

Dr. Werner Becker, a neuroscience professor from Calgary further concludes that "if post-traumatic headaches have migrainous features, then you treat them like migraine. In our experience if these patients don't respond to oral migraine prophylactic medicines, then Botox can be helpful as a prophylactic."

Antidepressants, blood pressure pills and anti-seizure medications used for migraine are commonly recommended.

Non-Drug strategies that are recommended include physiotherapy (to address neck stiffness), massage therapy, biofeedback or a relational technique such as Cognitive-Behavioural Therapy, targeting pain coping mechanisms. Details of these therapies can be found in the book Non-Drug Treatments for Headache, which can be purchased from Help for Headaches, or you can check your public library.

For a book on Migraine consider purchasing Dr. Elizabeth Leroux's book. It is available from Dundurn Press at https://www.dundurn.com/books/Migraines

Education, combined with record-keeping and lifestyle modifications should be considered.

#### Conclusion

Post-Traumatic Headache is a common health problem, and afflicts patients, burdens our health care system, puzzles physicians, and worries legal representatives and insurance companies (if a claim is involved). The impact on quality of life can be significant, for the sufferer and their relatives.

PTH is truly a challenge for all involved.

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