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Awareness of Depression in Patients with Migraine

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ABSTRACT

Migraines comprise a group of neurological symptoms that typically include severe, reoccurring, and throbbing pain on at least one side of the head. Individuals who suffer from migraine often experience disruptions in their work, family, social activities, and overall quality of life. The main objective of this review study is to analyse the depression in Patients with migraine. This review analysis was conducted in DHQ hospital, Rawalpindi during 2019. The data was collected from Google scholar, PubMed and Web of science. All the data were gathered for the clinical presentation of CST. All the data were collected and analyzed. Consistent with previous population-based research from Canada and

INTRODUCTION

Migraines comprise a group of neurological symptoms that typically include severe, reoccurring, and throbbing pain on at least one side of the head. Individuals who suffer from migraine often experience disruptions in their work, family, social activities, and overall quality of life. Costs related to migraine due to absenteeism and diminished productivity are estimated to be about 20 billion dollars per year in the US. Patients with cerebral venous sinus thrombosis (CVST) have variable presentations, especially early in the disease; 90% of them may present with migraine-like headache only that make them vulnerable to being misdiagnosed.

This delay in diagnosis may result in worsening of the patient's condition and makes it more difficult for them to be managed (Khan S-NH *et al.*, 2009). The principle pathology of CVT is thrombosis of cerebral veins and the commonest site of origin is believed to be the junction of cerebral veins and larger sinuses. The superficial cerebral venous system includes the cortical veins, the superior (Trollard) and inferior (Labbe) anastomotic veins and the superficial middle cerebral vein. These drain into the superior sagittal sinus (cortical and Trollard), the transverse sinus (Labbe) and cavernous sinus, respectively. The basal vein of Rosenthal, vein of Galen and transcerebral venous system drain the deep structures of the brain and form the inferior sagittal sinus and straight sinus (Rahman M *et al.*, 2009).

While there is strong evidence of a relationship between migraine and both depression and suicidal behaviours, less is known about what factors are associated with each of these comorbidities and whether they differ for depression and suicidal behaviours. One study found that individuals with migraine who are widowed, separated, or divorced have a significantly higher prevalence of major depressive disorder than those who are single or married/common law (Einhaupl KM et al., 1991). This study also found that a higher percentage of migraineurs with low incomes had depression than their more economically advantaged peers and that those with both migraine and depression had higher rates of disability and restriction of activities (Devasagayam S et al., 2016). It remains unclear whether these factors are independently associated with depression among those with migraine and whether these factors also relate to suicidal behaviours (Leach FL et al., 2006).

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abroad, this study shows that migraine is associated with current depression and lifetime suicidal ideation among members of the general community, even when accounting for sociodemographic factors and disability status. It is concluded that early diagnosis of migraine depends on the careful speculation of an experienced and oriented clinician.

Key words: Cephalalgia, Depression, Neurological symptoms

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Objectives

The main objective of this review study is to analyse the depression in Patients with migraine.

LITERATURE REVIEW

This review analysis was conducted in DHQ hospital, Rawalpindi during 2019. The data was collected from Google scholar, PubMed and Web of science. All the data were gathered for the clinical presentation of CST. All the data were collected and analysed.

Pathogenesis of CST

Cavernous sinus thrombosis has a distinctive clinical picture that includes, in classic acute cases, chemosis, proptosis, and painful ophthalmoplegia, initially unilateral but frequently becoming bilateral. Dramatic complications can occur such as extension to other sinuses and stenosis (with a mycotic aneurysm in one case) of the intracavernous portion of the internal

carotid arteries (Leach FL *et al.*, 2006). Cavernous sinus thrombosis is not always acute, however. It can also take a more indolent form (either spontaneously or because of the masking effect of an inadequate antibiotic regimen), with an isolated abducens nerve palsy and only mild chemosis and proptosis leading to great diagnostic difficulties.

The dural sinuses that are most frequently thrombosed are the superior sagittal sinus, the lateral sinus (transverse sinus and sigmoid sinus), and cavernous sinus. Less frequently affected are the straight sinus and the vein of Galen. Still rarely smaller cortical veins may be the primary site of thrombus formation without evidence of thrombus in the major sinuses or the thrombus in the major sinus would have resolved by the time the patient comes to clinical attention. This is one reason for the misdiagnosis in CT and MRI. Occlusion of a venous sinus and/or cortical vein is usually caused by a partial thrombus or an extrinsic compression that subsequently progresses to complete occlusion (Breslau N *et al.*, 1991).

Risk factors of migraine

Consistent with previous population-based research from Canada and abroad, this study shows that migraine is associated with current depression and lifetime suicidal ideation among members of the general community, even when accounting for sociodemographic factors and disability status (Kessler RC *et al.*, 1998). This study also adds to the literature by identifying the gender-specific factors that are independently associated with depression and with suicidal ideation among Canadians with migraine. Among both women and men with migraine, younger age, being unmarried, being poor, and having greater disability were each independently associated with higher odds of depression. One prior study also showed that a higher percentage of those with depression and migraine were poor and unmarried and had greater disability than those with migraine and no depression (Helvig AW *et al.*, 2013); however, this research did not investigate whether these factors were independent of one another or use gender-specific analysis.

No studies that we are aware of have looked at the factors associated with lifetime suicidal ideation among those with migraine. Moreover, we found some evidence of gender variation in these factors. For female migraineurs, most of the same factors that were related to depression were also linked to suicidal ideation (i.e., younger age, being unmarried, being poor, and having greater limitations in activities) (Bromberg J *et al.*, 2012).

For male migraineurs, three of these factor (i.e., younger age, being unmarried, and having greater limitations in activities) were associated with suicidal ideation; however, the other, being poor, was not. Further, white racial identity was associated with higher odds of suicidal ideation only among males with migraine. This is somewhat consistent with the literature, which finds that white males have a higher risk of suicide than other racial groups, especially black males

Treatment

The strong relationship found between the extent of disability and both depression and suicidal ideation among those with migraine is also notable. For example, migraineurs who often have difficulties with activities were shown to have approximately three times the odds of both depression and suicidal ideation. Note that many of the dimensions of disability assessed in the current study (e.g., difficulty seeing, hearing, communicating, and walking) can be considered part of the migraine spectrum (e.g., photophobia, phonophobia, visual aura, sensible aura, motor aura, and dysarthric aura). A high level of disability may reflect unmet treatment needs, which also play a role in depressed mood. Thus, achieving optimal management of migraine should be a primary focus of care. Unlike age, both lack of social support and unmet treatment needs are modifiable factors and, thus, can be affected by intervention. Recently, a web-based program designed to increase self-efficacy in migraine management and reduce distress was shown to increase headache self-efficacy, increase the use of relaxation techniques and social support, and decrease pain catastrophizing, depression, and stress. Further research should test whether this type of intervention, which is highly accessible, including to those outside of the healthcare system, should become a routine part of the management of migraine headaches.

It is already recommended that those with migraine are screened for depression. The elevated rates of lifetime suicidal ideation found among both men and women with migraine suggest that this should include an assessment of suicide risk, although further research is needed to establish whether routine screening of this sort is effective. Educating general practitioners to better identify and treat depression may also help reduce suicidal ideation while enhancing well-being. As many of those with migraine may not have had a recent consultation with a medical doctor about their headaches, there is a need to increase opportunities for identification and treatment of depression outside of primary care. Informing a wider range of health professionals and migraine sufferers themselves about the patterns of

depression and suicidal ideation surrounding age, marital status, and ac-

tivity limitations may help to increase awareness of the comorbidities of migraine and empower migraineurs to come forward with their mental health concerns.

DISCUSSION

Migraine is probably costing your company serious money. Migraine is a neurological condition that affects 1 in 5 of the adult population, runs in families and can be completely debilitating. If not dealt with appropriately it could land you in court. Diagnosis and treatment are often sub-optimal. The challenge is that symptoms can vary from one to another, and head-ache is not necessarily present. Disabling symptoms - apart from severe headache - may include cognitive dysfunction, nausea, vomiting, dizziness, visual disturbances, speech disturbance and sensitivity to light, noise, motion and odor. Sufferers commonly need to lie down in a dark quiet room during a bad attack.

A migraine attack can last from a few hours to many days. Even if the pain responds to medication, the attack can be followed by a phase akin to a hangover, rendering the individual foggy headed and unable to concentrate. There is frequently an anticipatory anxiety between the attacks, further adding to an individual's ability to function normally. For some particularly unlucky sufferers, a more disabling variant is chronic migraine: when sufferers have almost no symptom-free days throughout a month, which is often accompanied by depression and anxiety.

There is no diagnostic test for migraine and there is no complete cure. However, approaches such as preventative drugs, lifestyle strategies and avoidance of common triggers can minimise the impact and help to gain control. Triggers include changes in routine, such as too little or too much sleep, missed meals, jet lag, alcohol and motion intolerance. They are a bit like a ladder with each rung a stressor and migraine activates as you reach a certain high point on the ladder.

In the unpredictable world of business, it's safe to assume that leaders and senior management are likely to encounter many triggers on any given week of the year. Recognising them is the first step to managing them and can make a significant difference. Sometimes it is impossible

to control migraines through trigger management alone. Knowing what to do when an attack starts can significantly reduce the absolute severity and duration of an attack (Okura Y *et al.*, 2004).

CONCLUSION

It is concluded that early diagnosis of migraine depends on the careful speculation of an experienced and oriented clinician. The migraine clinical aspects are highly variable and inconsistent. Such types of conditions are difficult to diagnose unless the physician makes a prompt effort to detect them. Missing a migraine that presents with headache only is probably very common.

REFERENCES

- Khan S-NH, Adeoye O, Shutter TAALA, Ringer AJ. Intracranial dural sinus thrombosis: novel use of a mechanical thrombectomy catheter and review of management strategies. Clin Med Res. 2009; 7(4):157-165.
- Rahman Maryam, Velat Gregory J, Hoh Brian L, Mocco J. Direct thrombolysis for cerebral venous sinus thrombosis. Neurosurgical Focus. 2009; 27(5): E7.
- 3. Einhaupl KM, Villringer A, Meister W. Heparin treatment in sinus venous thrombosis. Lancet. 1991; 338: 597–600.
- Devasagayam S, Wyatt B, Leyden J, Kleinig T. cerebral venous sinus thrombosis incidence is higher than previously thought: a retrospective population-based study. Stroke. 2016; 47: 2180–

2182.

- Leach FL, Fortuna RB, Fones BV, Gaskill-Shipley MF. Imaging of cerebral venous thrombosis: current techniques, spectrum of findings, and diagnostic pitfals. Radiol Graphics. 2006; 26: s19– s43.
- 6. Breslau N, Davis GC, Andreski P. Migraine, psychiatric disorders, and suicide attempts: an epidemiologic study of young adults. Psych Res. 1991; 37(1): 11–23
- Kessler RC, Andrews G, Mroczek D, Ustun B, Wittchen HU. The World Health Organization Composite International Diagnostic Interview Short-Form (CIDI- SF). Int J Method Psychiatric Res. 1998; 7(4): 171–185.

- 8. Helvig AW, Minick P. Adolescents and headaches: maintaining control. Ped Nurs. 2013; 39(1): 19–25.
- Bromberg J, Wood ME, Black RA, Surette DA, Zacharoff KL, Chiauzzi EJ. A randomized trial of a web-based intervention to improve migraine self-management and coping. Headache. 2012; 52(2): 244–261.
- Okura Y, Urban LH, Mahoney DW, Jacobsen SJ, Rodeheffer RJ. Agreement between self-report questionnaires and medical record data was substantial for diabetes, hypertension, myocardial infarction and stroke but not for heart failure. J Clin Epidem. 2004; 57(10): 1096–1103.