



# Scientia Psychiatrica

Journal Homepage: [www.scientiapsychiatrica.com](http://www.scientiapsychiatrica.com)

eISSN (Online): 2715-9736

## Tension Type Headache Comorbid with Moderate Depression: A Case Report

Budi Pratiti<sup>1\*</sup>

<sup>1</sup> Department of Psychiatry, Faculty of Medicine, Universitas Gadjah Mada, Yogyakarta, Indonesia

### ARTICLE INFO

#### Keywords:

Tension type headache  
Moderate depression  
Case report

#### \*Corresponding author:

Budi Pratiti

#### E-mail address:

[budipratiti.md@gmail.com](mailto:budipratiti.md@gmail.com)

All authors have reviewed and approved the final version of the manuscript.

<https://doi.org/10.37275/scipsy.v1i2.12>

### ABSTRACT

Tension type headaches (TTH) are generally caused by psychological factors and psychiatric disorders. Anxiety disorders and depression are more often associated with TTH than other disorders. This case report discusses the tension type headache accompanied by depression and its management. Miss Y, a 17 year old girl, 2nd in birth order, an undergraduate student living in a boarding house with her sister and coming from a low socio-economic background, came to Dr. Sardjito General hospital, Indonesia with complaints of severe headache since 2 months ago. Family history shows that there is a conflict in the patient's parents which makes the patient disappointed. In the examination found inferiority feelings, guilt and worry will disappoint everyone. She was then agreed to do cognitive behavior therapy and take medication according to doctor's orders. After 8 sessions, she developed confidence and started to carry out daily similar sessions at home. Tension-type headache in this case is accompanied by a dominant psychological factor. Collaboration between pharmacotherapy and psychotherapy in treating patients with tension type headaches is a fairly effective choice.

### 1. Introduction

Tension-type headache (TTH) is the most common type of headache and the third most common disorder in the world. This disorder is less considered serious because the symptoms are mild in many cases. However, in some patients, TTH is a frequent or severe headache, so that they experience barriers to activity at work, school, or home.<sup>1-2</sup>

Some individuals with TTH come accompanied by psychiatric disorders. Among psychiatric illnesses, anxiety and depression were more often associated with TTH compared to non-headache participants. In addition, previous studies reported that there were no significant differences between patients with TTH and patients with migraines (often associated with anxiety or depression) regarding psychiatric comorbidities. In addition, anxiety and depression significantly affect the quality of life of patients and add significant disability in patients with TTH.<sup>1-3</sup> This case report reviews the headache disorder in the form of a tension

type headache accompanied by moderate depression and its management.

### 2. Case Presentation

Miss Y, a 17 year old girl, 2nd in birth order, an undergraduate student living in a boarding house with her sister and coming from a low socio-economic background, came to Dr. Sardjito General hospital, Indonesia with complaints of severe headache since 2 months ago. The history of the disease shows that the headache began two months ago and weighed for 1 week. This headache appears especially when the patient is trying to rest and watching television. The patient also complained of insomnia in the form of being unable to sleep until 2 am and waking up at 5 am. In the morning the patient felt tired and not fresh enough to move. The patient also becomes afraid of interacting with new people for fear that others will judge him unfavorably and the patient feels "like

everyone wants to embarrass me". Patients often feel tense and nervous when in a new place and meet new situations. Because she did not feel comfortable with these complaints, the patient then went to a general practitioner, the doctor said there was no abnormality and gave her anti-pain medication. Then, the patient was advised not to overload the mind, because the source of the pain is from the patient's stress and it was advisable to consult a psychiatric clinic.

Developmental history shows a disturbance in early childhood where breastfeeding was less than optimal because the mother returned to work after the patient was 3 months old. However, the patient is a student who is quite good at school and has never experienced bullying or sexual abuse.

Family history shows that there is a conflict in the patient's parents which makes her disappointed. Divorce plans of both parents make the patient sad and devastated. The patient's sister, who was also disappointed with the news, suddenly left home and there was no news. Since then, the patient's headaches have gotten worse and finally decided to consult a doctor.

In psychiatric interviews it was found that the patient was alert and oriented, feelings of inferiority, guilt, worry would disappoint everyone, preoccupation of worries in her new college. Insight was preserved in example she was sure that her feeling was irrational, illogical and caused by psychological disorders and the patient agreed to be treated. A diagnosis of tension type headache comorbid with moderate depression was considered. She was started on fluoxetine 20 mg / day and paracetamol 500 mg as analgesic. On examination with a house- tree-person test showed a threshold personality and Woodworth test showed a neurotic personality trait. In the measurement of HDRS scores, it was found 23 (moderate depression). After 2 weeks, the patient's mood begins to decrease (HDRS score is 18). The patient still feels headache, but with a lighter intensity. She was then agreed to do cognitive behavior therapy with her consent. Patients were asked to recognize in what situations patients usually start to feel depressed and kept a daily journal.

After 8 sessions, she developed confidence and started to carry out daily similar sessions at home.

Paracetamol was stopped within one week of starting psychotherapy. After a total of 12 therapy sessions, the patient feels minimal depression (HDRS 14) and begins to go out of her home and meet her neighbors. Her father was brought into the treatment network and family therapy was planned. In spite of continuing family issues at home, there has been no recurrence of symptoms of tension headache and depression at 6 months follow-up and subsequently fluoxetine has been stopped.

### **3. Discussion**

Headache disorders are very common and often become chronic. It is very common that around 50% of adults suffer from headaches over a 1-year period, and according to the Eurolight Project, 77% of adults in Europe experience at least one headache in their lives. Chronic headache, defined as headache that occurs more than 180 days a year or more than 14 days a month for more than 3 months, has also been reported as a prevalence with a 1% prevalence rate of 4.0%, and there is also a high frequency of possible headaches due to drug use with an estimated prevalence rate of 1 year 1-2% .<sup>4</sup>

A pharmacotherapy approach to the prophylaxis of headache disorders has been studied, and various drugs are currently being used. Antidepressant and anticonvulsant drugs, such as selective serotonin reuptake inhibitors, tricyclic antidepressants, and topiramate have shown efficacy for migraine prophylaxis and are frequently used. However, efficacy has not been sufficiently adequate, and in general, no single drug has appeared to reduce the frequency of headaches by more than 50% in about half of patients.<sup>5</sup> This unmet headache prophylactic need may be caused by a lack of understanding of the mechanism of headache. Functioning in modulation of nociceptive brain circuit stimulation, depressive cortical spread for migraine and obtaining central sensitization by peripheral activation for tension-type headaches have been suggested as a pathophysiology

of headache. But there is some controversy and they cannot fully explain the pathophysiology of headaches<sup>7,8</sup>. The drugs mentioned above seem to have an effect on modulation of central sensitization by reducing excitatory neurotransmission and facilitating inhibitory neurotransmission but the mechanism of action is also not fully understood.<sup>9</sup>

Tension-type headache (TTH) is the most common type of headache found in studies (48%), with psychiatric comorbidities of 48.9%. This is due to patients suffering from depression and anxiety disorders. Headaches are described as somatic symptoms in patients with depression and anxiety disorders. Headaches may be a form of somatization, because the patient cannot express his low mood. Headaches are also referred to previously as 'depression equivalent' and in non-industrial countries are considered as a typical way to manifest symptoms of depression.<sup>11</sup>

Psychological and pharmacological treatments can be combined in the management of headaches accompanied by psychiatric disorders. Because this comorbid condition can negatively worsen the quality of life, role function, and even increase the risk of suicide in sufferers. In addition to comorbid conditions, psychological treatments may affect the symptoms of headaches themselves. For primary headaches, such as migraines and tension type headaches, trigger factors have been investigated and developing strategies to manage these factors is suggested.

Cognitive behavioral therapy (CBT) is often used and has been proven effective for the management of stress and sleep disorders, which are important triggering factors for headaches. Relaxation and biofeedback training (BFT) has also been widely accepted for use in treating headaches. This psychological intervention has been studied and used in headaches for more than four decades. Evidence-based guidelines for migraine headaches developed by the United States Headache Consortium recommend relaxation training, BFT, and CBT as treatment options for migraine prevention.<sup>4,5</sup>

Furthermore, other modalities, such as mindfulness-based treatment (MBT) have evolved and are used to treat chronic pain disorders repeatedly. A comprehensive and up-to-date review of empirical research including studies from Korea using new modalities will be very helpful and can be the basis for recommendations regarding psychological treatment for primary headaches as a stand-alone treatment option or additional treatment with other treatment modalities in Korea.<sup>4,11</sup>

#### 4. Conclusion

Tension-type headache in this case is accompanied by a dominant psychological factor. Collaboration between pharmacotherapy and psychotherapy in treating patients with tension type headaches is a fairly effective choice.

#### 5. References

1. Global Burden of Disease Study C. Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet* 2015;386:743–800. pmid:26063472
2. Song TJ, Cho SJ, Kim WJ, Yang KI, Yun CH, Chu MK. Anxiety and Depression in Tension Type Headache : A Population-Based Study. *PLOS One* 2016. <https://doi.org/10.1371/journal.pone.0165316>
3. Zebenholzer K, Lechner A, Broessner G, Lampl C, Luthringshausen G, Wuschitz A, et al. Impact of depression and anxiety on burden and management of episodic and chronic headaches—a cross-sectional multicentre study in eight Austrian headache centres. *J Headache Pain* 2016;17:15. pmid:26920681
4. Lee, H.J., Lee, J.H., Cho, E.Y. et al. Efficacy of psychological treatment for headache disorder: a systematic review and meta-

analysis. *J Headache Pain* 20, 17 (2019).  
<https://doi.org/10.1186/s10194-019-0965-4>

5. Shoib S, Mushtaq R, Ahmad SR, Arif T (2014) Recognizing Risk of Psychiatric Comorbidity in Headache: Looking for Symptoms of Anxiety and Depression in Headache: A Study from General Hospital in Kashmir (India). *J Depress Anxiety* S1: 006. <https://doi.org/10.4172/2167-1044.S1-006>
6. Stovner LJ, Andree C (2010) Prevalence of headache in Europe: a review for the Eurolight project. *J Headache Pain* 11(4):289–299
7. Steiner TJ, Stovner LJ, Vos T, Jensen R, Katsarava Z (2018) Migraine is first cause of disability in under 50s: will health politicians now take notice? *J Headache Pain*. 19(1):17
8. Linde M, Gustavsson A, Stovner LJ, Steiner TJ, Barre J, Katsarava Z et al. The cost of headache disorders in Europe: the Eurolight project. 2012. *Eur J Neurol* 19(5):703–711
9. Rolan PE Understanding the pharmacology of headache. *Curr Opin Pharmacol*.2014. 14:30–33
10. Bendtsen L, Ashina S, Moore A, Steiner TJ. Muscles and their role in episodic tension-type headache: implications for treatment. (2016) *Eur J Pain* 20(2):166–175
11. Monzani L, Zurriaga R, Espí López GV. Anxiety and the severity of Tension-Type Headache mediate the relation between headache presenteeism and workers' productivity [published correction appears in *PLoS One*. 2018 Aug 9;13(8):e0202313]. *PLoS One*. 2018;13(7):e0201189. Published 2018 Jul 19.  
<https://doi.org/10.1371/journal.pone.0201189>

[89](#)