Association of migraine and obesity: A review of literature

O. Sadeghi^{*}

M. Nasiri^{***}

Gh. Askari^{****}

Z. Maghsoudi^{****}

*M.Sc. Student of Nutrition, Food Security Research Center, Isfahan University of Medical Sciences, Isfahan, Iran **M.Sc. Student of Nursing, Nursing College of Ahwaz, Jundishapur University of Medical Sciences, Ahvaz, Iran ***Ph.D. of Nutrition, Food Security Research Center, Isfahan University of Medical Sciences, Isfahan, Iran ****Ph.D. Student of Nutrition, Food Security Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

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Background: Migraine is one of the main reasons for primary and secondary headaches worldwide and has significant effects on patients' life. Based on recent studies, obesity may affect the severity, frequency and duration of migraine attacks.

Objective: This aim of this study was to review the literature on the association of migraine and obesity.

Methods: In this review, databases of PubMed, Scopus, Science Direct and Web of Science were searched using "migraine", "headache", "obesity" and "overweight" as keywords. Studies published between 2005 and 2014 were reviewed. Human studies in which migraine was diagnosed based on the International Headache Society (IHS) criteria were included. Articles with non-English languages and studies on headache as the main purpose were excluded. 10 articles met the inclusion criteria.

Findings: In most evaluated studies, the association of obesity (BMI≥30) and morbid obesity (BMI≥35) with high frequency of migraine attacks and frequent migraine headaches was significant. This association was more significant in younger subjects and subjects under 55 years old. There was no association between obesity and migraine symptoms (severity, frequency and duration of headache) in only one study. Another study indicated that BMI≤18.5 was associated with migraine.

Conclusion: With regards to the results, general and abdominal obesity can increase the frequency of migraine attacks; however, more studies are recommended.

Keywords: Migraine Disorders, Headache, Obesity, Overweight

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Corresponding Address: Morteza Nasiri, Nursing College of Ahwaz, Jundishapur University of Medical Sciences,

Ahvaz, Iran

Email: mortezanasiri.or87@yahoo.com

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