

Investigation of mental health in patients who require ortho surgery treatment in comparison with patients who require fixed orthodontic treatment alone before starting orthodontics treatment

Abstract

Background and purpose: Most patients with dental- facial abnormalities are shy, defensive and passive state due to lack of self-confidence caused by their appearance. So, it is important to support these patients for adoption a positive attitude in their social life. The purpose of this research is to investigate mental health in patients who require ortho surgery treatment in comparison with patients who require fixed orthodontic treatment alone before starting orthodontics.

Materials and method: This study investigated the number of 140 patients in the age range of 18 to 40 years old, referring to the orthodontics department of Khorasgan Faculty of Dentistry, in a descriptive-cross-sectional and analytical. The DASS-21 questionnaire containing 21 questions has been used in many studies, which has been created by Lavibond 1995. This questionnaire includes 3 subscales of Anxiety, Stress, and Depression, which each contains 7 questions. Each question is graded from 0 (does not hold true to me at all) to 3 (extremely holds true to me). since DASS-21 is a shortened form of the original scale (42 questions), the final score of each of these subscales should be doubled to be able to determine the symptoms severity.

Findings: Based on the results of the independent t-test in patients who require ortho surgery, the average of stress ($p < 0.001$) and depression ($p = 0.005$) score has been significantly higher in female patients than in male patients. But, there was no significant difference between male and female patients in the average of anxiety score at the 5% error ¹ level ($p = 0.053$). Of course, evidence is observed that the average of anxiety score of female patients is higher at the 10% error level ($p < 0.1$).

It was observed in patients requiring fixed orthodontic that the average of stress ($p = 0.001$) and anxiety ($p = 0.042$) score was significantly higher in female patients than in male patients. But, there was no significant difference between male and female patients in the average of depression score ($p = 0.166$).

¹ Percent error

Conclusion: Irrespective ² of gender, all three factors of stress, anxiety and depression are significantly higher in patients who require orthognathic surgery than in candidate patients for fixed orthodontic. The orthodontist needs to pay special attention to the patient's health in patients who require orthognathic surgery and consider that the patient's mental health status may be effective during the patient's process of treatment and follow-up and doing regular periodic visits. As a result, the necessary follow-ups for the patient and providing reassurance and improvement of mental health are part of the treatment process.

Keywords: Mental health, Orthodontics, Ortho surgery

² Irregardless