

The Comparison of Dental Procedures under General Anesthesia between Dental Anxiety and Mental Retardation

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ABSTRACT

Aim: The aim of this study was to evaluate dental procedures performed under general anesthesia in terms of mental retardation and dental anxiety.

Materials and Methods: A total of 54 patients were included in this study, 25 of whom were female (46.3%) and 29 of whom were male (53.7%). Patients were evaluated for systemic health status, mental retardation, dental anxiety and dental procedures.

Results: The age range of the patients is between 2 and 50 and the mean age is 12.33 ± 11.4 . When the patients were evaluated for dental anxiety and mental retardation; there were 13 patients (24.1%) of 54 patients with mental retardation and anxiety in the remaining 41 (75.9%) patients. When the patients were assessed for the presence or absence of a systemic problem, 40 patients (74.1%) of the 54 had no systemic problem and 14 (25.9%) had systemic problem. When dental procedures were evaluated; 52 patients of 54 were due to tooth extraction, 1 patient was due to cyst-tumor removal, and 1 was due to trauma seen to have undergone operation.

Conclusion: Dental procedure applications under general anesthesia due to dental anxiety; are more common than due to mental retardation.

Key Words: Dental anxiety, mental retardation, general anesthesia

INTRODUCTION

Most of the dental procedures can be performed under local anesthesia. However, patients with severe dental anxiety who have mental retardation or psychiatric

problems who cannot be cooperated may need to undergo general anesthesia. ^[1] Anxiety is a syndrome characterized by psychological and neurovegetative symptoms with an internal anxiety that patients may have difficulty in making meaning, concern and fear that can reach the level of panic. ^[2] Dental anxiety is defined as a state of intense discomfort that cannot be fully expressed, due to fear and delusions of dental treatment. ^[3]

In this study, it was aimed to evaluate the dental procedures performed under general anesthesia due to mental retardation and dental anxiety in terms of age, gender and procedures.

MATERIAL AND METHODS

A total of 54 patients were included in each age group undergoing dental procedure under general anesthesia. Demographic findings such as age and sex of the patients were obtained. Patients were evaluated for systemic problem. Dental anxiety or mental retardation was assessed. Dental procedures performed under general anesthesia were examined.

RESULTS

A total of 54 patients were involved to our study, 25 of them female (46.3%) and 29 of them male (53.7%) (Figure 1). Patients with dental anxiety, when assessed for gender, of the 41 patients, 20 (48.8%) were female and 21 were male (51.2%). When mental retarded patients were evaluated in terms of gender, it was seen

that 5 of 13 patients were female (38.5%) and 8 were male (61.5%).

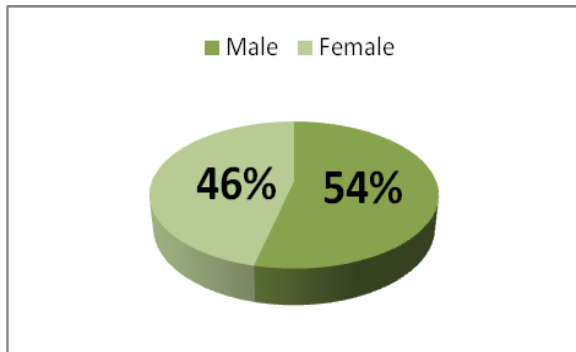


Figure 1: Distribution of Gender

The age range of the patients participating in the study is between 2 and 50 and the mean age is 12.33 ± 11.4 . The ages of the women were minimum 2, maximum 50 (mean 15.24 ± 13.6) and the ages of the men were minimum 2, maximum 39 (mean 9.83 ± 8.7). Mental retarded patients were found to have a minimum age of 8, a maximum of 27 (mean 15.15 ± 6.4). Dental anxiety patients were found to have a minimum age of 2, a maximum of 50 (mean 11.44 ± 12.6).

When the patients were evaluated for dental anxiety and mental retardation;

there were mental retardation in 13 (24.1%) of 54 patients and dental anxiety in 41 of 54 patients (75.9%) (Figure 2).

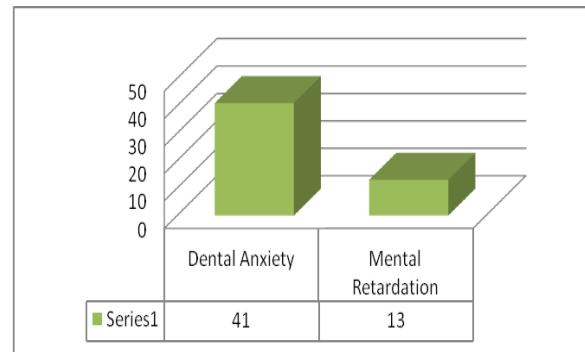


Figure 2: Evaluation of dental anxiety and mental retardation

When the patients were assessed for the presence or absence of a systemic problem, of the 54 patients, 40 (74.1%) had no systemic problem and 14 (25.9%) had a systemic problem. Of the patients with mental retardation, 9 (69.2%) had no systemic problem and 4 (30.8%) had a systemic problem. Of the patients with dental anxiety, 31 (75.6%) had no systemic problem and 10 (24.4%) had a systemic problem (Table 1).

Table 1: Evaluation of mental retardation and dental anxiety in terms of systemic problems

	Had No Systemic Problem	Had a Systemic Problem	Total
Mental Retardation	9 (%69.2)	4 (%30.8)	13
Dental Anxiety	31 (%75.6)	10 (%24.4)	41
Total	40	14	54

A total of 14 patients with systemic problems; it was seen that epilepsy in 5 patients, asthma in 4 patients, valvular heart murmur in 1 patient, aortic stenosis in 1 patient, hyperthyroidism in 1 patient, diabetes in 1 patient and hepatitis in 1 patient.

When dental procedures applied under general anesthesia were evaluated; of the 54 cases, 52 had tooth extraction, 1 had cyst-tumor surgery, and 1 had a surgery due to trauma (Table 2).

Table 2: Evaluation of applied dental procedures

	Count	Percentage
Extraction	52	%96.3
Cyst-Tumor	1	%1.9
Trauma	1	%1.9
Total	54	

DISCUSSION

Dental interventions during general anesthesia are now increasingly applied. [1] In dental examinations and treatments of patients, great fear and distress life, mental retardation and psychological problems are becoming increasingly important for general anesthesia usage. [1,4] The aim of this study is to evaluate the relationship of dental procedures applied to general anesthesia to dental anxiety and mental retardation.

Dental procedures of mental retarded patients can only be performed under general anesthesia. These dental procedures performed under general anesthesia; tooth filling and extraction, frenectomy, pulpotomy, gingivectomy, fissure sealant

and root canal treatment. [5] In this study, it was seen that all of the mental retarded patients were taken under general anesthesia for tooth extraction. In addition, it was seen that the mental retarded patients had a minimum age of 8, a maximum of 27 and a mean of 15 (15 ± 6.4) years. In addition, patients with mental retardation, when evaluated for gender, of the 13 patients, 5 (38.5%) were female and 8 were male (61.5%).

Dental anxiety affects approximately 10 to 20% of the adult population. [6] There are many factors that can cause dental anxiety. These; age, gender, social class, educational status, personality characteristics and past dental experience. [7] In our study, when dental anxiety patients were evaluated for their age, it was seen that the ages of the patients were minimum 2; maximum 50 (mean 11.44 ± 12.6). Doerr et al. and Marakoğlu et al. reported that dental anxiety was more frequent in patients who had low levels of education, who lived in rural areas and who had never any dental treatment, and children and young patients in their studies. [8] Except from these, dental anxiety is seen more common in women patients. [9] In our study, when patients with dental anxiety evaluated in terms of gender, it was found that 20 patients of the total 41 patients were women (%48,8), and the rest of the patients which means 21 of them were men (%51,2) and seen more frequently in women patients with accordance of the literatures.

CONCLUSION

It is increasing rapidly that performing dental procedures under general anesthesia day by day. This is main reasons of that dental anxiety and mental retardation. Because of dental anxiety, dental procedures under general anesthesia are more frequent than those due to mental retardation.

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