



Medical Results and Psychosocial Factors in Obesity Surgery

Obezite Cerrahisinde Medikal Sonuçlar ve Psikososyal Faktörler

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Abstract

Aim: Obesity is one of the most important health problems of our age. It causes serious psycho-social problems as well as medical problems. We aimed to investigate the preoperative and postoperative medical and psycho-social changes in patients undergoing obesity surgery.

Methods: One hundred four patients, who underwent surgery between January 2016 and August 2016 and accepted to participate in the survey, were included in the study. Six questions were asked about the factors predicting the need for surgery as well as the medical and psychosocial changes after surgery.

Results: When the results of the surgical procedures were examined, there was a statistically significant difference in only the fifth question between sleeve gastrectomy group and gastric bypass group ($p<0.05$). No statistically significant difference was found in other questions. All patients in the gastric bypass group discontinued medication after surgery. The result was statistically significant.

Conclusions: Besides the positive medical results, we think that in the treatment of obesity, the role of surgery is increasing because of positive psycho-social outcomes in patients.

Keywords: Obesity, psychosocial factors, social media, surgery

Öz

Amaç: Obezite ciddi psikososyal sorunlara ve tıbbi sorunlara neden olabilir. Bu çalışmada obezite cerrahisi geçiren hastalarda preoperatif ve postoperatif medikal ve psikososyal değişiklikleri araştırmak amaçlanmıştır.

Yöntemler: Morbid obezite nedeniyle Ocak 2016-Ağustos 2016 tarihleri arasında ameliyat edilen hastalardan, çalışmaya katılmayı kabul eden 104 hastaya anket çalışması uygulandı. Hastalara kendilerini ameliyat olmaya yönlendiren faktörler, cerrahi sonrası medikal ve psikososyal değişiklikler hakkında altı soru yöneltildi. Hastalar gastrik bypass ve sleeve gastrektomi operasyonu geçirenler olarak iki gruba ayrıldı. İki grup arasındaki sonuçlar analiz edildi.

Bulgular: Cerrahi işlemlerin sonuçları incelendiğinde, gastrik bypass grubu ile sleeve gastrektomi grubu arasında sadece "sistemik hastalık nedeniyle ameliyat öncesi kullanılan ilaçlara devam ediyor musunuz?" şeklindeki soruda sonuçlar istatistiksel olarak anlamlıydı ($p<0,05$). Gastrik bypass grubundaki tüm hastalar cerrahi sonrası ilaç tedavisini bıraktığını bildirdi. Diğer sorularda istatistiksel olarak anlamlı bir fark bulunmadı.

Sonuç: Başarılı tıbbi sonuçların yanı sıra, olumlu psikososyal geri dönüşler nedeniyle obezite tedavisinde cerrahinin rolünün giderek arttığını düşünüyoruz.

Anahtar Sözcükler: Obezite, psikososyal faktörler, sosyal medya, cerrahi

Introduction

Obesity is one of the most important health problems of our age. It has serious morbidity rates. Obesity is among the leading causes of preventable death in developed countries. It causes serious psychosocial problems as well as medical problems. The role of surgery in the treatment of obesity is increasing. In this study, we aimed to investigate the preoperative and postoperative medical and psycho-social changes in patients undergoing obesity surgery (1-3).

Methods

Patients who underwent surgery at Elazığ Medical Park Hospital, General Surgery Clinic between January 2016 and August 2016 were informed about the survey.

One hundred four patients who accepted to participate in the survey were included in the study. Six questions were asked about the factors predicting the need for surgery as well as the medical and psycho-social changes after the surgery. The participants were asked to

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respond the questions which are the most important for themselves and explain the reasons if they wanted to. In the light of the answers, it was researched whether the surgical procedure could meet the expectations of the patients. Informed consent statement does not apply to this retrospective study. For this retrospective study ethical approval statement formal consent is not required.

Statistical Analysis

The results of the survey were evaluated by the SPSS data analysis program. The groups were divided according to gender and surgical procedure and compared with the non-parametric Mann-Whitney U test. A p-value of less than 0.05 was considered statistically significant.

Results

The average age of the participants was 38.7 (17-63), 59.6% were female (n=62) and 40.4% were male (n=42). Ninety patients had laparoscopic sleeve gastrectomy and 14 patients underwent laparoscopic Roux-en-Y gastric bypass surgery. The shortest follow-up period was 12 months and the longest follow-up period was 18 months.

The first question asked was "What was the most important problem for you before surgery?". 63.5% of patients (n=66) reported physical appearance and 36.5% (n=38) systemic disease (Table 1).

The second question was "What was the most important factor for taking the decision of surgery?". 61.5% of the patients (n=64) stated social media and environmental influences and 24% (n=25) physical appearance. Only 14.4% (n=15) reported health problems (Table 2).

The third question was "Would you take the same decision of surgery if you had a second chance". 95.2% of the participants responded "Yes" (n=99). Only five patients reported that they would not want to have surgery because of the pain after surgical procedure (Table 3).

The fourth question was "Did the surgical procedure satisfy your expectations?". 87.5% (n=91) responded "Yes" and 12.5% (n=13) "Partially". There was no participant responding "No" (Table 4).

The fifth question was "Do you continue the medications you used for your systemic disease you had before the surgery?". 89.4% (n=93) of participants, who used drugs for a systemic disease before surgery, did not use any medicine after surgical procedure and 6.7% (n=7) reported that the amount of medication they regularly used was decreasing. 3.8% (n=4) of patients continued to use drug after surgery (Table 5).

The last question was "What was the most important change in your life after surgery?". For this question, 43.3%

Table 1. First questions results

Operation			Gender, n (%)		Total, n (%)
			Male	Female	
Sleeve gastrectomy	What was the most important problem before surgery for you?	Physical appearance	26 (68.4)	34 (65.4)	60 (66.7)
		Systemic diseases	12 (31.6)	18 (34.6)	30 (33.3)
Gastric bypass	What was the most important problem before surgery for you?	Physical appearance	38 (100)	52 (100)	90 (100)
		Physical appearance	1 (25)	5 (50)	6 (42.9)
		Systemic diseases	3 (75)	5 (50)	8 (57.1)
			4 (100)	10 (100)	14 (100)

Table 2. Second questions results

Operation			Gender, n (%)		Total, n (%)
			Male	Female	
Sleeve gastrectomy	What was the most important factor in making an operation decision?	Social media, environmental influences	24 (63.2)	33 (63.5)	57 (63.3)
		Physical appearance	7 (18.4)	7 (13.5)	14 (15.6)
		Health problems	7 (18.4)	12 (23.1)	19 (21.1)
Gastric bypass	What was the most important factor in making an operation decision?		38 (100)	52 (100)	90 (100)
		Social media, environmental influences	3 (75)	4 (40)	7 (50)
		Physical appearance	0 (0)	1 (10)	1 (7.1)
		Health problems	1 (25)	5 (50)	6 (42.9)
			4 (100)	10 (100)	14 (100)

of participants (n=45) reported increased self-confidence and resolved psychological problems and 41.2% (n=43) reported improved quality of life. Only 15.4% (n=16) regarded improvement of health problems as the most important change in their life (Table 6).

There was no statistically significant difference in the responses between genders ($p>0.05$). The difference in the answers to the 5th question was statistically significant between the two groups. No statistically significant difference was found in other questions. All patients in

Operation			Gender, n (%)		Total, n (%)
			Male	Female	
Sleeve gastrectomy	If you went to your old self, would you decide again on surgery?	Yes	37 (97.4)	48 (92.3)	85 (94.4)
		No	1 (2.6)	4 (7.7)	5 (5.6)
Gastric bypass	If you went to your old self, would you decide again on surgery?	Yes	4 (100)	10 (100)	14 (100)
		No	4 (100)	10 (100)	14 (100)

Operation			Gender, n (%)		Total, n (%)
			Male	Female	
Sleeve gastrectomy	Did the surgical procedure respond to your expectations before the surgery?	Yes	36 (94.7)	41 (78.8)	77 (85.6)
		Partially	2 (5.3)	11 (21.2)	13 (14.4)
		No	38 (100)	52 (100)	90 (100)
Gastric bypass	Did the surgical procedure respond to your expectations before the surgery?	Yes	4 (100)	10 (100)	14 (100)
		No	4 (100)	10 (100)	14 (100)

Operation			Gender, n (%)		Total (n) (%)
			Male	Female	
Sleeve gastrectomy	Do you continue to use the medications you used due to systemic diseases after surgery?	No	36 (94.7)	49 (94.2)	85 (94.4)
		Decreased	2 (5.3)	3 (5.8)	5 (5.6)
		Yes	38 (100)	52 (100)	90 (100)
Gastric bypass	Do you continue to use the medications you used due to systemic diseases after surgery?	No	2 (50)	6 (60)	8 (57.1)
		Decreased	0 (0)	2 (20)	2 (14.3)
		Yes	2 (50)	2 (20)	4 (28.6)
		No	4 (100)	10 (100)	14 (100)

Operation			Gender, n (%)		Total, n (%)
			Male	Female	
Sleeve gastrectomy	What was the most important change in your life after surgery?	Increased self-confidence, resolved psychological problems	14 (36.8)	24 (46.2)	38 (42.2)
		Increased in living standards	17 (44.7)	22 (42.3)	39 (43.3)
		Resolved health problems	7 (18.4)	6 (11.5)	13 (14.4)
		No	38 (100)	52 (100)	90 (100)
Gastric bypass	What was the most important change in your life after surgery?	Increased self-confidence, resolved psychological problems	2 (50)	5 (50)	7 (50)
		Increased in living standards	2 (50)	2 (20)	4 (28.6)
		Resolved health problems	0 (0)	3 (30)	3 (21.4)
		No	4 (100)	10 (100)	14 (100)

the gastric bypass group discontinued medication after surgery. The result was statistically significant.

Discussion

Obesity is a multifactorial disease caused by genetic, environmental and psychological factors. For this reason, it is one of the most difficult diseases to treat (4,5).

Psychiatric disorders are common in obese patients. The most common diagnoses are anxiety disorders, mood disorders, binge eating disorder and personality disorders, respectively. Psychosocial problems, such as dissatisfaction with physical appearance, unhappiness in marriage, and difficulty in sexual life, are more common in obese individuals than in healthy individuals (6-8).

The expectation of the patients who undergo obesity surgery is also very important. Patients, who have many problems in many areas of their life, may assume that all their problems will end up after surgery. This can lead to long-term psychiatric treatments after surgery (9). Bariatric surgery has been shown to improve quality of life as well as to improve comorbidities and maintain weight loss (10,11). There are also studies reporting that many psychiatric problems existing prior to surgery decreased after surgery (12).

Obesity surgery provides significant psychosocial improvements as well as medical outcomes. In this study, it was observed that, social media and environmental influences were more effective than health problems in patient's decision making on surgery. Again, in the majority of patients, who decided to undergo surgery, their physical appearance played a more dominant role in deciding on surgery when compared to systemic diseases or difficulties caused by obesity. According to the results of this study, technological improvements and information accessibility have significant effects on patients' decision on obesity surgery.

Conclusion

In conclusion, besides the positive medical results, we think that obesity surgery will continue to increase its role in the treatment of obesity because of positive psychosocial outcomes.

Author Contributions

Surgical and Medical Practices: F.D. Concept: M.D., F.D. Design: M.D., F.D. Data Collection or Processing: M.D., F.D. Analysis or Interpretation: M.D., F.D. Literature Search: M.D., F.D. Writing: M.D., F.D.

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