Original Article

Patient satisfaction in hair transplant surgery

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Abstract

Objective To evaluate the patient's satisfaction after hair transplantation.

Patients and methods The study was carried out on 100 consecutive patients undergoing hair transplant surgery. All the patients were given a detailed preoperative consultation. Hair transplants were performed using local anaesthesia with adrenaline along with a mild oral sedative. The procedure was performed under clean conditions, sterile and disposable instruments and magnification. The donor strip was harvested with patient in prone position. The closure of donor area was done using a non-absorbable suture. Postoperatively, no bandages were applied and patients began shampooing after 48 hours. The stitches were removed after 10-12 days. To assess patient satisfaction, a questionnaire was filled about the important factors pertaining to the patient experience during and after hair transplantation.

Results 98% of the patients rated the consultation as 'excellent to good', 2% as 'satisfactory', and none as 'unsatisfactory'. 60% of the patients were 'anxious' during strip harvesting and 24% felt 'normal'. 74% remained 'normal' on 1st postoperative night. 28% patients rated the overall experience as 'excellent', 38% as 'good'.

Conclusion Every surgeon performing hair transplantation should publish his patients satisfaction data from time to time, so that factors should be identified which can help improve the patients satisfaction.

Key words

Follicular unit transplantation, patient satisfaction, male-pattern baldness, hair transplantation

Introduction

The first hair transplants were performed by Dieffenbach in 1822. In the late 1950's, Orentreich's grafting techniques established the foundation on which modern hair transplant technique is based. Technical advances have led to renewed enthusiasm for hair restorative surgery among patients and surgeons.

The use of single hair grafts was initially

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Dr. Muhammad Ahmad Aesthetic Plastic Surgery, H.No.D-28, Block-6, Shah Faisal Colony, Airport Link Road, Rawalpindi, 46200 E-mail: palsticsurgeon999@yahoo.com reported by Tamura.3 Nordstrom and Marritt introduced single hair grafts to improve frontal hair line after hair transplantation as an attempt to provide a natural appearance.^{4,5} When patients have developed sufficient hair loss to prevent them from styling their hair in a preferred manner, they are candidates for evaluation. As with all aesthetic surgery, realistic patient expectations are essential with regard to density, the amount of preexisting hair in the recipient area, and the texture, colour, and caliber of donor hair. These can all influence the final result. To please the patient, both the surgical criteria and the aesthetic criteria must be met.6

In order to evaluate the patient satisfaction after hair transplantation, following study was carried out.

Patients and methods

The study was carried out on 100 consecutive patients undergoing transplant surgery. All the patients were given a detailed preoperative consultation. Hair transplants were performed using local anaesthesia containing adrenaline along with a mild oral sedative. The procedure was performed under clean conditions, with sterile and disposable instruments and magnification. The donor strip was harvested with patient in prone position. The closure of donor area was done using a non-absorbable suture. Postoperatively, no bandages were applied and patients began shampooing after 48 hours. The stitches were removed after 10-12 days. To assess patient satisfaction, a questionnaire (Figure 1) was filled about the important factors pertaining to the patient experience during and after hair transplantation.

Results

98% of the patients rated the consultation as 'excellent to good', 2% as 'satisfactory', and none as 'unsatisfactory'. 60% of the patients were 'anxious' during strip harvesting and 24% felt 'normal'. 74% remained 'normal' on 1st postoperative night (Table 1). 28% patients rated the overall experience as 'excellent', 38% as 'good' (**Table 2**).

Discussion

The modern era in hair transplantation started in 1939 when Japanese dermatologist Okuda placed skin grafts containing hair follicles, by opening round

Figure 1 Questionnaire

| Q.1- Preoperative consultation |
|---|
| □Excellent |
| \Box Good |
| □Satisfactory |
| □Unsatisfactory |
| Q.2- Experience during strip harvesting |
| □Normal/relaxed |
| \Box Confused |
| □Irritated |
| □Depressed |
| □Anxious |
| □Fainting |
| Q.3- Experience during graft placement |
| □Normal |
| \square Anxious |
| □Tense |
| \Box Relaxed |
| Q.4- First postoperative night |
| □Normal |
| \square Anxious |
| □Irritated |
| Q.5- Donor site pain/discomfort |
| □No pain |
| \Box Slight |
| □Uneasiness |
| □Severe |
| Q.6- Overall satisfaction |
| □Excellent |
| □Very good |
| \Box Good |
| □Fine |
| □Satisfactory |
| □Poor |

Table 1 Experience after 1st night (n=100)

| Experience | n (%) |
|------------|---------|
| Normal | 74 (74) |
| Anxious | 22 (22) |
| Irritated | 6 (6) |

Table 2 Overall satisfaction (n=100)

| Grade | n (%) |
|--------------|---------|
| Excellent | 56 (56) |
| Very good | 30 (30) |
| Good | 8 (8) |
| Fine | 4 (4) |
| Satisfactory | 2 (2) |
| Poor | Nil |

holes on scarred areas of burn victims.^{7,8} Another Japanese dermatologist Tamura restored hair in the female pubic area with grafts containing 1-2 hair roots.⁹ Orentreich in 1959, used the modern hair transplantation technique for male-pattern baldness, preferring 4mm punches.² The

term 'follicular unit' was defined in 1984 by Headington.¹⁰ Follicular units are prepared by the isolation of natural hair clusters of one to three follicles, under magnification.

The evolution of hair transplantation has been guided by and described as the 'quest for achieving the greatest hair density while retaining complete undetectability and naturalness of appearance'. Great advances towards this goal have been made, and the technique of follicular unit transplantation has played an integral role. If the grafts are obtained using the methodologies described and they are handled with the proper care and attention, the patient should receive the full benefits of this technique.

Application of the follicular unit technique (FUT) does not necessarily provide good results always. Placement of the follicular units without suitable planning may cause bad cosmetic results. While planning, the forehead structure of the patient, texture and status of the patient's existing hair, and the specifications of the patients were taken into consideration. More importantly, the direction of slits at the recipient area was one of the most important point.

The patient expectations are also a key point in hair transplantation. Those patients with unreasonably high expectations should be excluded from surgery. The patient must also be informed that a 2nd session may be necessary based on the outcome of the first session and the progressiveness of baldness. If all these issues are taken into consideration, the patient satisfaction is definitely very high. Unfortunately, there are very few studies which comment on patient satisfaction. Majority of the studies present the

photographic data (before and after photographs).

In the study by Baser *et al.*¹² three questions were asked: *i.* anterior hairline, *ii.* direction of hair growth, and *iii.* density. 81.1% of the patients rated the results as 'good' or 'very good', while 4.1% were not satisfied with the results.

In the present study, a variety of questions were asked (**Figure 1**), and the overall satisfaction was 86% ('excellent' to 'very good'). More importantly, none pronounced as 'poor' (**Table 2**). The reason for this could be the number of follicular units. As in the study by Baser *et al.*¹² minimum number was 1051 and maximum was 2150 follicular units whereas in the present study, the average number of follicular units was 2200.

The author recommends that every surgeon performing hair transplantation should publish his patients satisfaction data from time to time, so that factors can be identified which help improve the patient satisfaction. Importantly, good planning, carefully prepared follicular units, and careful placement of the grafts provide results that are satisfying for both the doctor and the patient.

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Authors Declaration

Authors are requested to send a letter of undertaking signed by all authors along with the submitted manuscript that:

The material or similar material has not been and will not be submitted to or published in any other publication before its appearance in the *Journal of Pakistan Association of Dermatologists*.