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## Candidacy of females for hair transplantation

Walter Unger, MD Toronto, Ontario, Canada [wung@bellnet.ca](mailto:wung@bellnet.ca)

Last year, in an issue of O, The Oprah Magazine, one of our esteemed colleagues was quoted as saying that “only about 20% of female patients with thinning hair are candidates” for hair transplantation. If I had been asked, I would have said that of the women that I see in consultation, only 20% are not candidates and, at the very least, a majority are.<sup>1</sup> More specifically, at most, only 20% of the women that I see do not have sufficient acceptable donor tissue for at least one small session of 800-1,200 FUs. Acceptable donor is hair that is judged to be permanent and that lies in the area of scalp considered to be the donor area for males. Although many of the women we see have more than one such session available in their donor area, if even one procedure is carried out in a well-chosen, cosmetically important area, they can achieve a very satisfying cosmetic result (Figure 1).

There is good reason to believe that this statement in O Magazine could be understood (directly and indirectly) by millions of women with female pattern hair loss (FPHL) as a consensus view of hair restoration surgeons (HRS). What is in fact the consensus of a sampling of expert hair restoration surgeons on this subject? I thought it was important to try to clarify the answer to that question by sending an email to a large group of some of our most experienced colleagues. Each was asked: What percentage of women you see with FPHL has at least enough good donor tissue for one small session of 800-1,000 FUs?



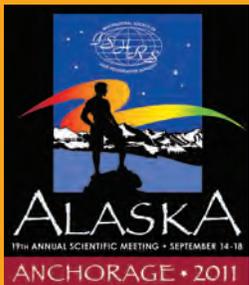
Figure 1. A: A 52-year-old female patient before hair transplanting in a frontal midline area with low hair density. B: 7 years after a hair transplant consisting of 843 FU and 113 DFU (a total of 1,069 FU). The patient was being seen for possible transplanting posterior to the first recipient area. C: Photo taken at the same time as B, with the hair combed back for critical evaluation. A little hair placed properly and with good hair survival goes a long way cosmetically. The fear of losing transplanted hair is also misplaced if the donor area has been appropriately chosen.

Out of the 28 physicians who responded to the question, the following was found: 6 thought that 20% to 25% (or fewer) women with FPHL they see are candidates; 2 thought approximately 35%; 7 thought 40 to 50%; 5 thought 60 to 65%; 8 thought 70 to 80% (or more). Included in the lowest percentage group were Drs. Bernstein, Rassman, Wolf, Epstein, Wong and Stough. The 8 members of the group that answered 70% or more included Drs. Limmer, Beehner, Perez-Meza, Leonard, Cooley, Mayer, Jerry Shapiro, and the presenter. Some of the reasoning of members of each of the groups is included below.

It was unanimously agreed that all patients (incidentally men as well as women) should be advised of the likelihood of loss of *some* transplanted hair over the years. It was, of course, universally agreed upon that none of the respondents would operate on somebody whose donor area might be satisfactory today but he/she thought would most likely be inadequate in the future. Because of this reality, the most cautious of us would pick the lowest percentages of acceptable candidates. Unfortunately, this group would probably never know whether their pessimistic prognosis was valid or not because they would almost certainly never again see a large majority of their rejected patients. On the other hand, surgeons at the optimistic prognostic end of the acceptable scale would be very likely to see their patients again—especially if they were dissatisfied—and would therefore be more appropriately informed as to whether or not they should change their practice philosophy.

The source of patients for different offices is different and this is likely to affect the percentage of “acceptable” patients seen. For example, those doctors whose practice referral source is primarily the Internet or other promotional venues are more likely to see a higher percentage of unacceptable individuals than those surgeons whose patients are primarily referred by knowledgeable prior patients, physicians and hairstylists. Moreover, the entire group agreed, for a variety of reasons, that not everyone who is a candidate should or would proceed because of

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information they should *always* be given about the procedure, the postoperative sequelae—especially the temporary recipient area hair loss that occurs in approximately 50% of women—and their personal likely outcomes. For example, in a subsequent review I conducted on 471 consultations I had with women from 2003 to 2009, who I thought could proceed with surgery, only 36% did so. In comparison, more than 60% of men I have “accepted” in the last year have proceeded with surgery. (This is probably a higher percentage than in most practices because most of my patients come to me via prior patient, physician or hairstylist referrals.)

A surgeon’s view of the likely success of a hair transplant will quite reasonably always be affected by his or her prior patient results. Some of the experts in the 20-25% group said that minimal hair density gain was the rule rather than the exception in the women they had operated on. It is worthwhile remembering that risk tolerance tends to go down much faster with negative experience than up with positive experience. Those in the higher percentage acceptability group (and certainly in my experience) have found that both of the often suggested threats of 1) possibly accelerating hair loss when transplanting into still hair-bearing areas, or 2) achieving minimal improvement in such sites, are avoidable. A randomly selected group of 50 female patients I treated from 2003 to 2009 who were asked in a mailed questionnaire: Knowing what you know now, would you do it again? and Would you recommend it to a friend? resulted in only one of them answering “no” to the first question and another one “no” to both. The latter patient was seen for reassessment and changed her mind when she was shown her “before” photos—she subsequently had another transplant. Interestingly, the other patient who did not come in for re-assessment answered “yes” to the second question.

Having observed many hair restoration surgeons operate over the years, I believe the most common cause for poor results in hair-bearing areas (whether in women or men) is the operator incising recipient area sites too quickly and therefore not optimally following the angle and direction of the existing hair. A video of the author making recipient site incisions at typical speed can be found at: [http://www.youtube.com/watch?v=xmeYfHh4z\\_E](http://www.youtube.com/watch?v=xmeYfHh4z_E).

The second most common cause of poor results—especially in women—is an FU/cm<sup>2</sup> density that is too high. It should be remembered that lower graft densities than in men are advantageous for women who generally have the aforementioned smaller donor areas than those usually found in men, and that high graft densities are not necessary to produce very satisfying results in women. This is because women have more hairstyling options than men, long hair optimizes hair coverage for any given number of hairs, and women very rarely lose all of the hair in an affected area. Therefore, the potential cosmetic benefit from any given number of transplanted hairs or FU/cm<sup>2</sup> in an area—typically 20-25 FU/cm<sup>2</sup>—is greater (both short-term and long-term) than in men.

Two of the respondents found that only 20% of the women they do magnified trichoscopic exams on during consultations have acceptably low levels of donor area “hair miniaturization.” In my opinion, the potential donor areas of women tend to be incorrectly assessed in many cases. Trichoscopy should not be carried out in 4 to 6 “standard” fringe areas as is commonly done

in men. Rather, the donor areas are virtually always properly limited to occipital and parietal areas (virtually *never* temporal areas) and they are often more inferior than the usual locations in men. Twenty women with worse than average donor areas but who the author deemed acceptable for hair transplanting, had satisfactory donor areas at approximately the level of and/or inferior to the occipital protuberance. Those areas are shown in violet and blue in Figure 2, as compared to the typical donor area in men, which is shown in the yellow and violet areas. This female donor area would virtually never be assessed during consultations with magnification for miniaturization if the same areas used for male assessments were sampled with trichoscopy. Thus, the patients would be incorrectly rejected. As an example, a patient came to our office one month after having been rejected by a physician in the 20% female candidacy group. “Confused” and “hopeless” were her stated emotions after being informed of her poor candidacy based ostensibly on her poor donor/recipient area ratio. A folliscope exam of 9 regions both within and at the border of her potential donor area revealed an average prospective donor area density of 118 FU/cm<sup>2</sup> and a terminal to ostensible vellus hair ratio of 96:4 (Figure 3). With her well-defined recipient area, this is an example of how an overly conservative approach can be as damaging to the quality of patient care as an overly aggressive one.

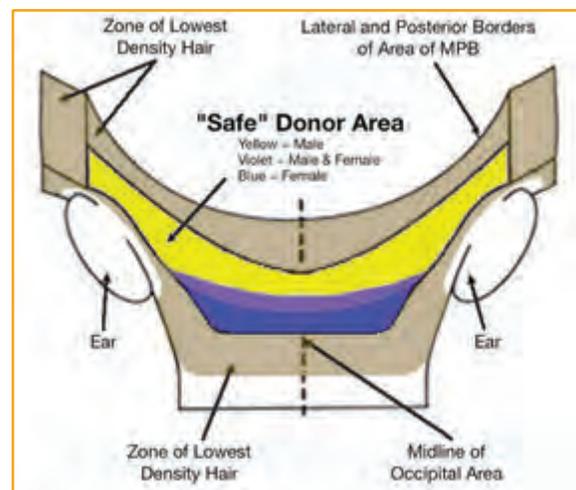


Figure 2. The violet and blue areas represent the acceptable donor area found in 20 women with worse than average female donor areas. The typical donor area in men is represented by the yellow and violet areas.



Figure 3. A representative folliscope photo taken in a woman who had been rejected on the basis of an inadequate donor area one month earlier, by one of the 20% group physicians. The average FU density was 118 FU/cm<sup>2</sup> and she had a terminal to ostensible vellus hair ratio of 96:4.

A direct visual search for good potential donor areas should be done before any trichoscopic examination, and if the latter is unfavorable, it should be repeated, for example, 12 weeks later, to see if some “miniaturized” hairs were actually early anagen hairs that could not initially be morphologically distinguished from truly miniaturized hairs. At the 2010 ISHRS Annual Scientific Meeting in Boston, before I presented a lecture on hair transplanting in females, I asked three widely respected hair experts, Drs. David Whiting, Marty Sawaya, and Jerry Shapiro, if they thought that a single trichoscopic examination could really tell an observer whether somebody had a disproportionate percentage of miniaturized hairs in the area they are examining, or whether they couldn't. Dr. Whiting in essence said he thought the whole exercise was so “useless” that he never (he emphasized the word) used that method to study miniaturization. Instead, he uses biopsies with transverse sectioning. Dr. Sawaya agreed that unless you did a second examination, you could not deduce anything from a single one, and Dr. Shapiro said the same thing (I spoke to him by phone because he wasn't at the meeting). I asked these acknowledged world experts in the study of hair diseases specifically because I wanted to prepare for what I expected to be a vigorous assault on my view. Nobody in the audience attempted to contradict their replies. Let me be clear, however: If a physician is doing more than one examination, I do believe it could be helpful. It's just a single examination that is not nearly as definitive as too many would like to believe.

## Conclusion

A substantial majority view of expert hair restoration surgeons (20 of 28) is that at least 40% of patients they see with FPHL have acceptable donor area reserves for at least one session of hair restoration surgery. (Six of 28 thought only 20-25% are acceptable while 8 of 28 thought 70% or more are candidates.) Not all of them should or will proceed because of what the patient (not the physician) views as the cosmetic limitations of a single session, or because of the *short-term* potential sequelae of the surgery, most commonly in the author's experience the approximately 50% incidence of some degree of temporary recipient area hair loss. Donor areas in women are not only more limited than in men but they tend to be lower in the occipital and parietal areas than in men. A single folliscope exam in clinically acceptable potential donor areas is *not* definitive; a negative one should be repeated approximately after three months or later.

## Reference

1. Unger, W.P., and R.H. Unger. Hair transplanting: an important but often forgotten treatment for female pattern hair loss. *J Am Acad Dermatol.* 2003(Nov); 49(5):853-860.

A note from Robert T. Leonard, Jr., DO Cranston, Rhode Island, USA  
[hairdr@pol.net](mailto:hairdr@pol.net)

I would like to comment on Dr. Walter Unger's excellent article discussing the candidacy of women for hair transplantation. As was mentioned, I am a surgeon in the group who believes that more, rather than fewer, women are candidates for this often life-altering procedure.

We must never minimize the fact that we are physicians first and that these female patients are usually suffering—badly—because of the loss of their hair. Evaluation for hair restoration in

*Editor's note:* Dr. Unger has brought up a very important topic that illustrates that even the most experienced hair transplant surgeons can disagree. What is apparent, though, no matter which group you fall into, is that as the doctor you must do your best to act in the patient's interest. In spite of this, however, we sometimes will “get it wrong.” I probably fall into the 50% group with women's surgical recommendations because my patients come from a combination of referrals (e.g., patients, other physicians) and other sources (e.g., Internet). Of the referral sources, those women recommended by dermatologists and plastic surgeons will fall into the 80% group, and of the others it entirely depends on the source. Therefore, when reviewing the figures in Dr. Unger's article, it is important to be cautious and not just take them at face value.

The principle of small operations for women confined to an area just behind the hairline is one that we use in almost all of our female patients with FPHL. It is often quite remarkable the difference in hair styling achieved by a small operation (Figures 1 and 2).



Figure 1. Patient 1: A: Pre-op; B: 1 operation of 850 FUs.



Figure 2. Patient 2: A: Pre-op; B: 2 operations of 1,300 FUs each.

I agree with Dr. Unger's concept of going lower with the donor area. Because you are confined to a smaller available zone, in order to get sufficient length of donor, you inevitably have to take the donor from a lower site. Dr. Bob Leonard is quite right that women often want the option of tying their hair up, which means we have to avoid going too low. —NF ♦

these patients needs to be carefully, honestly, realistically, and compassionately undertaken.

One of the most important things we must consider is how *little* hair will be enough to make them feel better about their condition:

- To make them be able to more easily prepare for their day.
- To allow them to not have the “*think about their hair all the time,*” which is a common comment made to me by these girls and women.

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- To offer what physicians are supposed to do for their patients—provide relief of suffering, if at all possible for their patients.

Therefore, it is critically important for the doctor during the consultation process to provide *honest* and *realistic* expectations to these women so that they can then make the appropriate decision as to whether or not to undergo the transplant. Tell them what the limitations are with regard to donor availability. Explain to them how large (or small) a surgical session can be to achieve a desired result.

Bigger (or more) is often not better for these patients:

- Often a small session in the area immediately posterior to the hairline will offer them enough hair to style in order to decrease the “see-through” concern about which many complain.
- Too large of a session will cover more area, but often at the expense of density.
- Sadly, (and I sincerely mean this), it is not uncommon for me to see patients who were recommended to have a large number of grafts to cover a large area of thinning. The motivation, I am sure, is monetary and not in the best interest in the patient’s well-being.
- A huge number of tiny grafts can do more harm than good. Think about it logically: very often a woman’s hair loss is more of a thinning problem versus a balding one. If a surgeon makes a very large number of very small incisions very close to one another within an area that has follicles providing hair coverage to the patient, regardless of how carefully and slowly one creates these incisions, this *will* damage/destroy existing follicles. This approach greatly increases shock hair loss, does damage to follicles that could have continued to produce hair for the remainder of the patient’s life, and provides final results that still are quite thin.

Another point I want to offer, especially since the membership of the ISHRS has grown significantly since the days of larger grafts, is that bigger, in some aspects, may, indeed, be better for our female patients.

One of the most wonderful aspects of medical practice is

that it takes practice. And, practice does, indeed, make perfect. The longer you are in this magnificent profession, the more you will realize that everything you learned in the past need not and should not be put on the shelf as being no longer useful.

In my experience over these last 25 years in the field of hair restoration surgery, I have seen techniques that have come and gone and then have returned. I also have seen individuals who embrace a particular surgical method and use it all the time in every patient. Some actually, either quietly in the confines of their consultation room or loudly on the Internet, lambaste colleagues who do not agree with their point of view!

I strongly believe that surgeons in this field should utilize any technique that they have in their experience to provide their patients with the best possible results.

So, in my humble opinion, transplanting larger, rather than smaller, grafts in our female patients offers them a fuller, thicker result. Larger grafts, away from the hairline, give these patients more hair with which to style without damaging as many existing follicles and existing growing hair.

The bottom line in evaluating these patients is to understand and to manage their expectations. I, like Dr. Unger, have seen many women who have been rejected as surgical candidates who then go on to have a procedure with me and become extremely happy and satisfied patients. Unfortunately, I also observe the opposite: Women who come in after having huge numbers of minuscule grafts that have destroyed existing hair and have provided very little resultant density—pretty much kicking her while she was down.

In conclusion:

- Be realistic in your evaluations of these vulnerable patients.
- Remember that even a little hair—strategically transplanted—will be therapeutic and satisfying to them.
- Don’t be cemented into using only one technique for all of your patients.
- Respect the body’s ability to heal.
- First look out for your patients’ best interests and not for your deposit slips.
- Thank you, Dr. Unger, for your expertise and mentorship through the years.
- Continue to be excited and feel blessed to be a part of this exceptional Society and profession! ♦



A note from Ed Epstein, MD *Virginia Beach, Virginia, USA*  
[esehairmd@gmail.com](mailto:esehairmd@gmail.com)

Recently I participated in a survey by Dr. Walter Unger in which I responded that only 20-25% of women with FPHL in my practice were HT candidates. Ten percent of hair transplants in my practice are women, as I tend to be more conservative in the selection process. While the donor areas of most women can support a single 800-1,200 graft session, many have donor supplies limited to the occipital area, average or sub-optimal density, and/or fine texture, which either excludes them from higher graft number sessions, or may provide results that, while an improvement, may fall short of patient expectations, even when those potential less dense results are thoroughly discussed. Dr. Unger’s

observation of higher density below the occipital protuberance is interesting, but I have concerns about scar widening in this area as well as potential scar visibility when the hair is pulled up and worn on top of the head. The phenomenon of post-procedure shedding, despite slow and deliberate site placement and reduced use of epinephrine, is disconcerting to both patient and doctor, and, in my hands, contributes to a more conservative approach in patient selection. ♦