

imperfect fit, recipient sites formed with circular punches create more scar tissue altering scalp morphology compared to, recipient sites created by small scalpels. Additionally, the oft-cited advantage of punches, the removal of non-hair-bearing scalp, is not significant. These factors lead to more noticeable and less aesthetically acceptable results when punches are used in hair transplantation.

## ***DISTURBED BY COMMENT***

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I was disturbed to read Dr. James Arnold's comments in *Forum* #3, page 12 on my "Follicular Family Unit" article in the previous edition of the *Forum*. In the pursuit of brevity, I shall comment only on the more important aspects of Dr. Arnold's letter.

Dr. Arnold mentions that he has seen "a number" of patients transplanted using only follicular units, who have a desire for more hair behind a densely packed hairline. The density achieved with follicular units is simply a result of the number of hairs transplanted per unit area of recipient skin, regardless of the method used. Therefore, it must be that the patients he is referring to obviously didn't get enough follicular units. During patients' pre-operative consultation, the doctor must make it quite clear that a large number of hair is needed to achieve density over a worthwhile area, whether these hairs are delivered by follicular units or any other method. In other words, when one changes from minigrafts to follicular units, one has to appropriately increase the number of grafts transplanted per session.

Dr. Arnold's statement, "O'Tar Norwood acknowledges this density problem" is quite untrue. Dr. Arnold has misinterpreted Dr. Norwood's meaning. Dr. Norwood was just catering to the common desire for most hair transplant patients to always have even more hair. The limitations of reaching such goals lie in the number of donor hairs available, not the method of delivery.

Dr. Arnold makes the statement, "a major reason microscopic dissection has been advocated is to prevent transection of hairs. Reduced transection of hairs *per se* is not the main, nor the only reason. There are many reasons why microscopic dissection of donor hairs is superior to more traditional and less sophisticated methods. Microscopic dissection of donor hair produces an extra 10 to 30% more of the same-sized grafts from the same-sized donor area. Dr. Robert Bernstein's recent study (accepted for publication) shows equal donor areas produce approximately 20% more hairs for grafting when dissected microscopically compared to dissection by loupe magnification! To first say that microscopic dissection should be used because it transects fewer hairs — and then to prove that a substantially reduced percentage of transected hairs can still grow — does not indicate that microscopic dissection has no value.

The main reason for using the stereoscopic microscope with all donor hair dissection is because all those who have used it (to the point of developing skill) have found they obtain 10 to 30% more (same-sized) grafts from the (same-sized) donor area.

Now when one tries to explain the reasons and mechanisms behind this well-known empirical fact — one may begin to use words like transection, X-factor, H-factor, and gentler handling of grafts, etc. My personal feeling at the moment regarding the explanation of WHY and HOW (the stereoscope produces a higher yield) is that reduced transection of hairs is probably a very minor factor. Transected hair follicles seem to have some ability to repair themselves after transection, although all the published literature on this subject, shows a significantly decreased survival and re-growth of transected hair follicles dependent upon the level of transection (0%-80% survival — Ref: Kim Jahoba, Limmer.) The studies on complete follicular unit survival consistently reveal 90-100% plus survival rates. This increased number of grafts obtained (and also, incidentally, the increased survival rate of ALL grafts harvested and transplanted) is probably because of much more precise and deli-

cate handling under the microscopic visualization.

Penultimately, there is the issue of what the photograph shows. The photographs were carefully chosen out of many slivers from many different strips. The two hairs on the extreme right of the sliver in Fig. A are not transected as Dr. Arnold thinks, but are simply miniaturized hairs. On careful inspection of the original photographs, one can see many equally short hairs with their dermal papillae visible. These represent numerous miniaturized hairs that to the untrained eye may look as if they have been transected.

Dr. Norwood's excellent editorial (in the *Hair Transplant Forum International* May-June 1998, page 10) acknowledges the variability in the number of hairs that "follicular units" can, at the discretion of the cutter, contain. Hitherto, this variability in the number (either fewer and larger, or more and smaller) of "near-perfect grafts" obtained (by different cutters) from the same strip — was an insignificant curiosity. The "Family Follicular Unit" is simply a means of manipulating this variation in size of the follicular unit for the benefit of the patient.

## ***PRICE WARS***

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Recently I have been designated as a Diplomat of the American Board of Hair Restoration Surgery. I am honored to be a member of this board, yet I wonder what is in store for those of us who specialize in hair restoration.

Over the last 12 years I have seen many changes to our specialty. Changes in the size of grafts, methods for harvesting and placement have made achieving a natural appearance with greater density far more realistic than ever before. This coupled with the need for less procedures and at a significantly lower cost, makes hair restoration a tremendous value for our patients.

I am, however, concerned and confused about the price war that many physicians seem to have promulgated. I am referring to the ads in the newspapers that state the price per graft. Few of