Hairline Placement

Any physician who transplants hair should be an expert in hairline construction.

While we can create a naturally shaped hairline in one session, it is often necessary to adjust the shape and position in future sessions to meet the patient's desires. The cardinal sin is to place the hairline too low. If the hairline is higher than the final result, it can still appear natural. The patient can contemplate the hairline position after one session has matured and if desired it can easily be lowered in the future. In the majority of my patients some adjusting of hairline density and location during the second session is necessary not because it is unnatural but because it can be improved.

The distance between my index and little fingers (four fingerbreaths) is 8cm. Although this distance has served me well over the years in preventing the creation of hairlines that are too low, the shape of the patient's existing hairline and face dictates the distance above a line connecting the eyebrows. I still have natural hairs in my hairline 5cm above my eyebrows. Transplants have been placed 6cm above my eyebrows and my hairline looks natural. Although the 8cm. distance is a good guideline, we must be flexible and let the patient's features guide the location and shape of the hairline.

Although the shape of patients' skulls differs and a horizontal hairline can be appropriate, I seldom create a horizontal hairline as it appears too bowl shaped. In almost all cases point A (center of the forehead) is inferior (lower) than point B (temples). This configuration mimics more closely a mature and timeless hairline. Again we should be flexible and let the patient's features guide the shape.

I have never had a patient ask to have a cowlick remade. If fact I've often thought that the only advantage to losing hair is losing a cowlick. The aberrant angulation of the hair shaft that creates the cowlick presents permanent styling problems. Angling transplants in the hairline posteriorly (backwards) would recreate a cowlick. With significant hair loss the superior silhouette, top, of a person assumes the shape of the skull, spherical. This spherical silhouette causes those men with extensive hair loss to have a similar appearance, losing some individuality of appearance. Changing this silhouette by that formed with transplanted hair precludes the spherical shape. Without the play of vertical against horizontal, there can be no experience of three dimensional space. The exit angle of the transplanted hair determines the new silhouette. The exit angle varies throughout the scalp. In the frontal half it normally varies between 30 degrees and 60 degrees anteriorly (forward). Infrequently, in those with natural "bangs", the exit angle is less than 30 degrees. If the new angulation is greater than 60 degrees the patient can appear to have a "frightened" or unnaturally high new silhouette. As hair volume is lost, especially in the frontal half of the scalp, prior to assuming a spherical shape, the area first appears flattened. Angling hair shafts posteriorly (backwards) in the frontal half of the scalp, when surrounding shafts emerge angled at 30 degrees to 60 degrees anteriorly (forward), contributes to a flattened appearance. If indigenous hair is present in the area it is usually safe to mimic this angle with transplanted hair, except when a cowlick is present.

Patients, especially younger ones, request the hairline to be curved at the corners (temples) but I resist this temptation is the vast majority of patients. Curving at the

temples can create an unnatural, animal like, appearance. Again, the patients' facial features should guide hairline configuration.

It is important to create a density gradient at the interface or transition zone from skin to hairline. To guide me to create a density gradient and soft transition zone, three parallel lines separated by 4-5mm each are used. The first zone is the absolute interface and beginning of the transition zone. This zone contains elongated triangles of single hairs with low density (10-15 hairs/sq.cm). In the second zone the single hairs are symmetrically placed with higher density (25-35 hairs/sq.cm). The third zone contains two hair follicular units, symmetrically spaced, as densely as possible (40-60 hairs/sq.cm). In one session it is difficult to achieve density greater than 60 hairs/sq.cm. This method allows me to create a natural density gradient in one session. It is often necessary to increase the density at future sessions.



There is equal distance between follicular bundles, creating a pattern with equal spacing. Aside from the transition zone at the interface of hair and skin where true randomness is natural, I take great pains to create small spaces that are equal in size in each tonal plane. Light reflects with greater intensity from curvilinear surfaces. The location on the scalp where the hairline is placed is the transition from horizontal to vertical, a curvilinear surface, or tonal plane that reflects light with greater intensity than flat surfaces.



In our palette we not only have grafts but also spaces between grafts to create the overall impression. Light reflection from the scalp determines the perception of hair loss and can be affected in a variety of ways by altering the scalp surface color/texture or ambient light intensity. We choose to use hair as a natural way of obstructing light reflection from the scalp. Light reflects from these spaces and if the spaces are small the light reflection will be less than that from larger spaces. If the spaces are equal in size, the light reflection will be evenly diffused re-creating the natural symmetrical reflective pattern.

The hairline, more than any region of the scalp, defines the result in hair restoration. It is the signature of the surgeon and becomes that of the patient. Recreating a natural appearing hairline requires observation, experience, and artistic foresight. If we classify ourselves as artists we would be photorealists as we attempt to imitate nature. The hairline can appear as abstract expressionism if we attempt to express ourselves on the scalp in a manner unlike nature. In painting, sculpture, and architecture the materials used are inert. We construct a dynamic result with three dimensions when transplanting growing hair, which requires anticipation. When creating a hairline it is more important to not get it wrong the first time than to get it finished in one session.