The Art of Natural Looking Hair Transplant Surgery

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Naturalness in Hair transplant

• To come close to the nature is a desire we all have and especially when it comes to cosmetic surgery.
Hair Transplant

- Presentation
- Patient selection
- Planning
- Team work
- Results
Patient selection

- Type A – 200 hairs per cm. sq.
- Type B – 150 hairs per cm. sq.
- Type C – 100 hairs per cm. sq.
- Type D – 50 hairs per cm. sq.
- (type D’s are not good candidates for hair transplantation)
Planning the Procedure

- Important Steps in Planning:
  - 1. Patient concern and expectation
  - 2. Evaluation of the donor area
  - 3. Hair loss pattern
  - 4. Anticipated future hair loss
  - 5. Artistic craftsmanship
Planning The procedure

• Developing a long term plan is the most important step to creating the best results for Hair Transplantation.
Planning for the Procedure

• Patient Concern and Expectations
• Listen – Find out as much as you can about the patients goals, desires and wishes. Do the best you can to understand clearly all aspects of what the patient is thinking, feeling and wanting with his/her hair restoration. Always Listen
Planning for the Procedure

- Physicians Point of View
- Patients should understand that in hair transplantation his existing hair would be redistributed in the bald area. Patients should also understand that hair loss is an ongoing process. Which once starts it never stops, and also understanding the fact the younger the age the faster the hair loss would be.
4000 grafts
Anticipated Future Hair Loss

• If the patient is 25 years of age and has a class II-III baldness, he can go to class VII with in a 10 year time. If the patient is 50 years old and has class II-III baldness he probably cannot go to class VII even in 20 years.
Designing the Hair Line is an Art

- Art is subjective which means what inspires me may leave you uninspired. But it’s the difference of opinion that makes the world an interesting place.
Hair Line

1. Lower transition zone
2. Mid calvarium Hairline placement level
3. Upper transition zone

Height of calvarium

90°
45°
10°

Trichion
Frankfurt horizontal
Craniofacial Measurements of an Attractive Face

1. Larger height of the calvarium
2. Forehead inclination
3. Deeper nasal root
4. Smaller nasal bridge inclination
5. Larger nasal tip angle
6. Smaller mentocervical angle
7. Craniofacial height proportionate to width
Craniofacial Measurements of an Attractive Face

V
4.8 cm
Tr
6.7 cm
N
4.5 cm
SN
7.4 cm
Ge
Determining Factors For Hairline

• The determining factor for the general appearance of the hair line in different races.
  – The height of the calvarium
  – The height of the forehead
  – The outer canthal width
There are three important anatomical landmarks to design the hairline.

1. Frontal Midpoint
2. Frontal Temporal Angle
3. Temporal Peaks
Caucasian Hair Line
Chinese Hair Line

15.83 (eu-eu)
15.18 (t-t)
10.73 (go-go)
African American Hair Line
Designing the Unique Individual Hair Line

- *Locating the frontal mid point*
Frontal Midpoint

Craniofacial measurements are used as a guideline to place the frontal midpoint. Moving the frontal midpoint up or down changes the shape of the hairline, respectively, from oval to
Important Factors for Frontal Midpoint

- Height of the face
- Height of the calvarium
- Forehead width
- Forehead inclinations
- Existing frontal forelock
- Nasal Root Depth
- Height of the chin
- Facial shapes
Height of the Face

For placing the frontal midpoint, facial height is measured from glabella to chin. This ranges from 13 - 15 cm.

Then calvarium height is measured from trichion to vertex. This ranges from 3-5 cm.

Half of the facial height and one fourth of the calvarium height is used to place the frontal midpoint for a proportionate face.
Height of the Face
Height of the Calvarium

- Calvarium height affects the facial shape. If calvarium height is less than 3 cm, the face looks round.

- In this situation, calvarium height is not factored into the equation for placing frontal midpoint.

- This hairline adds more depth to the restored hair and changes the round facial shape to a more proportionate facial appearance.
Height of the Calvarium
Forehead Width

- For narrow and wider foreheads, a lower hairline is needed to provide a more balanced facial appearance.

- Outer canthal width also changes the shape of the hairline. Outer canthal width in Chinese are 1.5 - 2.5 cm more than Caucasians, which lead to a wider oval or round hairline in Chinese.
Forehead Width
Forehead Inclination

• Positive forehead inclination creates bossing while negative inclination leads to a receded forehead.

• A relatively low hairline provides an illusion of a more balanced face for both inclinations.
Forehead Inclination
Existing Frontal Forelock

• A relatively low hairline with frontal midpoint at half of the facial height provides a hairline which blends nicely with the forelock.

• If the forelock is too low, avoid placing the frontal midpoint at this low level. The forelock may not be permanent.
Existing Frontal Forelock
Chin Height

- The chin counterbalances the forehead.
- A weaker chin provides an illusion of a larger forehead.
- The frontal midpoint is lowered in order to compensate for that illusion.
Facial Shapes

A normal face is proportionate in face and width. Small variations in length and width changes the normal face into different shapes. There are four common variations in facial shapes.

1. Round
2. Long narrow
3. Square
4. Triangular
Facial Shapes

• Except in proportionate faces, a relatively lower placement of the frontal midpoint with results in a lower hairline helps to bring these faces into symmetry.

• Square facial shapes need special attention. A soft, flat hairline blends nicely with square faces.
Temporal Peaks and Hairline

- Temporal hairline extends up from the anterior part of the sideburn to join the frontal hairline at the outer canthal plane.
- Temporal hairline has temporal peaks at 4 cm above the Frankfurt horizontal line.
- Temporal hairline recedes backwards and downwards.
- Temporal hairline can be restored by extending it upward with negative inclination to meet the frontal hairline at/or in front of pre-tragal vertical line on outer canthal plane.
- Temporal peak restoration provides more natural and attractive profile view.
• Temporal Peaks and Hairline

- Area to be restored
- Pretragal vertical line
- Receded temporal hairline extended up to join this peak
- Temporal Peak
- 5 cm Frankfurt horizontal
Frontal Temporal Angle

- A pre-tragal vertical line is drawn up to the vertex.
- Frontal midpoint is traced horizontally parallel to Frankfurt horizontal line. Where ever this horizontal line meet existing temporal hair, that will create the frontal temporal angle.
- This junction is moved 3 - 5 mm upward to provide a gentle drop to frontal midpoint.
- This drop provides an attractive hairline.
• The concept of hair restoration surgery has moved from having hair on the scalp with no attention to the naturalness.
Naturalness......

• To a hair Transplant which not only covers the bald area but also has a very natural looks.
Simple use of follicular units does not produce naturalness unless specific attention is given to few important factors.
What Gives this Natural Effects?
Natural Looking Hair Transplant

1) Irregularly irregular hair line
2) Having a transition zone
3) Acute angle of exit
4) Density
5) Angle of curvature of hair shaft.
Important Factors:

- A Broken Hair Line:
  Irregularly irregular hair line
Important Factors:

• Transition Zone:
Important Factor:

- Density: 4200 Follicular Units in one surgery
Important Factor

• Angle of Exit of Hair from the scalp.
Important Factor

• Angle of Curvature

It is the natural curve of a hair shaft which is visible when a follicular unit is harvested.
Angle of Curvature of Hair Shaft
Team Work

- All grafts are dissected by 5 trained Technicians who used either no magnifications or 2.5 loop magnifications.
Naturalness
Solution

• Dr Myer’s technique horizontal mobility scale

• Dr Mohmand’s vertical mobility Scale
• Donor area assessment technique: Mobility in the vertical direction
Follicular Unit Extraction
Tricophytic scar closure
Wedge excision and
Minimal visibility
Burns & Hair Transplant
Naturalness

- A good cosmetic surgery is not visible.
RESULTS
RESULTS
Results
Female pattern of Androgenic Baldness
Thank you