Male and Female Pattern Hair Loss

Craig L. Ziering, DO, FAOCD, FISHRS
Beverly Hills, CA
AOCD Fall Meeting
September 17, 2016
Disclosure

• R & D for Restoration Robotics
Dr. Craig L. Ziering, D.O., FAOCD, FISHRS
Medical Director

- Beverly Hills Surgeon
- Over 25 years exclusively performing hair restoration procedures
- Over 20,000 hair transplant procedures performed with patients all over the world, including celebrities, royalty and physicians
- Worldwide Media Expert on Hair Restoration
Causes of Male Pattern Hair Loss

DHT, a key factor in male pattern hair loss, is a substance found in the body. It may contribute to shortening the growing phase of hair, causing hair follicles to get smaller and smaller until there are fewer visible hairs left.

ZIERING
Causes of Female Hair Loss

- Anemia
- Thyroid Disease
- Excess Androgens
- Psychological Stress
- Traction Alopecia
- Childbirth

- Fever
- Surgery Stress
- Auto-Immune Disorders
- Crash Dieting
- Severe Illness
- Genetics

A typical female sheds between 60 and 120 hairs a day.

With the advancement of Microscopic Follicular Unit Grafting, many women are excellent hair transplant candidates.
Types of Female Hair Loss

**Ludwig I-1:**
The central parting of a woman with no hair loss.

**Ludwig I-2 I-3 I-4:**
The width of the parting gets progressively wider indicating thinner hair along the center of the scalp.

**Ludwig II-1 II-2:**
Diffuse thinning of the hair over the top of the scalp.

**Ludwig III:**
A woman with extensive diffuse hair on the top of the scalp, but some hair does survive.

**Ludwig Advanced:**
A woman with extensive hair loss and little to no surviving hair in the alopecia affected area. Very few women ever reach this stage and if they do, it is usually because they have a condition that causes significant, abnormally excessive androgen hormone production.

**Ludwig Frontal:**
A woman with a pattern of hair loss that is described as “frontal accentuated”. That means there is more hair loss at the front and center of the hair parting instead of just in the top middle of the scalp.
Hair loss is progressive. If we are going to add hair surgically, we still need to understand the importance of keeping your native hair.
Non-Surgical Options

1. Oral Tablet: Finasteride
   (5mg available for post-menopausal females)

2. Topical Foam or Liquid: Minoxidil

3. Scientific: Laser Therapy (LLLT)

4. Natural Supplement: Viviscal Professional
   - ACell/PRP and SMP
Finasteride is a prescription drug that prevents the conversion of testosterone to dihydrotestosterone (DHT) in the body. Specifically used to treat hair loss and male pattern hair loss on the vertex and the anterior mid-scalp area. Suitable for men and post-menopausal females.

Less than 1.8% have shown minimal sexual side effects within the first 2 to 3 weeks.
Finasteride 1mg

- This is the most effective DHT Blocker on the market today.

- Clinical Trials conducted on thousands of men have shown that after 2 years of use, 66% of men showed increased hair growth. 30% of men showed a slight improvement, 31% moderate improvement and 5% great increase. 83% of men in the trial showed no further hair loss.
SUGGESTED USE:

- Apply Minoxidil Solution twice daily
- Towel dry or blow dry hair before application
- Apply directly onto the scalp
- Wash hands after application
- Apply 5 minutes before using styling aids
- Do not shampoo or swim for 4 hours after application
- Let solution dry before going to bed
Minoxidil 5%

Topical Hair Loss Treatment Studies show that at 48 weeks of use, Minoxidil hair loss medication stabilizes hair loss in over 70% of men and approximately 80% of women.

Acts as a Vasodilator that helps increase blood circulation to the hair follicle.

* During the first 2-4 weeks of use, excess shedding may occur
Low Level Laser Therapy technology harnesses light energy and emits it from a laser diode that penetrates the scalp and invigorates the cells that deliver nutrients and oxygen to hair follicles.

The scientific term for the process is called “photobiostimulation” (PBS).
1) An increase in ATP (Adenosine Triphosphate) and protein synthesis,
2) Improved cell proliferation and eliminates oxygen free radicals,
3) Reinvigorates the sebaceous gland and strengthens the erector pili muscle
4) Increased blood circulation
Laser Therapy
LLLT

**SUGGESTED USE:**

- Months 1-6: 3 times per week for 30 minutes each
- Months 7-12: 2 times per week for 30 minutes each
- After 1 year: 1 time per week for 30 minutes

Results and time frames may vary per patient, so increase usage with additional shedding or for increased effectiveness.
Viviscal Professional 100% drug free supplements are scientifically formulated with the proprietary marine protein complex AminoMar and the important nutrients Biotin and Apple Extract to nourish thinning hair and promote existing hair growth from within.

“Viviscal® strengthens and replenishes vital nutrients in thinning hair. It is a natural dietary supplement, safe for both men and women, with clinical studies that support its use for promoting existing growth. I find it particularly useful for my patients who want to bring their hair back in balance during periods of everyday stress.” – Dr. Craig L. Ziering, DO, FAOCD
Proof Positive:

- 75% of studied participants observed a significance decrease in hair loss
- 92% of alopecia patients showed re-growth of permanent hair after 6 months
- 83% of alopecia totalis patients showed re-growth of permanent hair after 4 months
- 15% of study participants showed partial re-growth
- 93% of customers would recommend it to a friend
- 125% increase in terminal hairs after 6 months
- 75% saw an increase in overall hair volume
- Baseline 0-90 day subjects showed a significant increase in the number of terminal hairs and diameter
Top Row. Macrophotographs of the target area at baseline (left), 90 days (center) and 180 days (right). Bottom row. Digital images of the target area at baseline (left), 90 days (center) and 180 days (right).
Combined Non-Surgical Therapy

Before / After 6 Months:
Viviscal Professional and Laser Cap Treatment

ZIERING
What is SMP?

- Similar to a tattoo but with different ink and smaller needles
- Gives the appearance of 2D hair follicles “shaven hair follicle”
- Can be used in patients:
  - With various forms of alopecia
  - Using hair system or hair concealers (Toppik, SureThik)
  - Previous transplant scars (both FUT/FUE)
  - Male or female pattern hair loss
5

SMP
Scalp Micro Pigmentation
5

SMP
Scalp Micro Pigmentation

Before / After

ZIERING
5

SMP
Scalp Micro Pigmentation

ZIERING
ACell / PRP

(Platelet Enriched Plasma)

Before / After 6 Months
Non-Surgical Cover Up

Before and After 2 Minute Treatment w/ SureThik

ZIERING
Surgical Options
Trichosculpture

• The artistic arrangement and redistribution of hair utilizing the most advanced technology and surgical techniques in combination with the classical principles of art to create a natural, aesthetically pleasing hair restoration result
Trichosculpture

• Involves recognizing the entire three-dimensional qualities of the head and face
• Combines classical principles of design with a patient’s unique bone and facial structure to create a custom hair restoration that extends way beyond the simple transfer of hair used by other hair restoration techniques
• Gives you more balance, symmetry, volume, and depth to the crown
• Makes the absolute most of the patient’s donor hair
Ziering Zones
Ziering Zones

Male Zones 1-4

Zone 1:
Hairline
800-1200 grafts
Approx. area = 30 cm²

Zone 2:
Hairline and
Temporal Peaks
1200-1500 grafts

Zone 3:
Frontal 1/3
1500-1800 grafts
Approx. Area = 70 cm²

Zone 4:
Frontal 1/2
2000-2500 grafts
Approx. Area = 100 cm²
Ziering Zones

Male Zones 5-8

Zone 5:
Partial Crown
800-1250 grafts
Approx. Area = 50 cm²

Zone 6:
Complete Crown
1400-1750 grafts
Approx. Area = 80 cm²

Zone 7:
Expanded Crown
1800-2250 grafts
Approx. Area = 100 cm²

Zone 8:
Posterior 2/3
2300-2750 grafts
Approx. Area = 130 cm²
Ziering Zones

Female Zones 1-3

Zone 1: Mild
800-1200 total grafts

Zone 2: Moderate
1500-2000 total grafts

Zone 3: Severe
2000-2500 total grafts
Ziering Zones

Female Zones 4-6

**Zone 4:**
- Frontal 1200
- 1500 grafts

**Zone 5:**
- Hairline
- 1500 - 1800 grafts

**Zone 6:**
- Advanced Hairline 2000
- 2500 grafts
4 Surgical Steps

1 - Donor Harvesting
2 - Micro-Dissection
3 - Recipient Site Creation
4 - Graft Placement
Treatment Area Design

- Recipient Plan
- Donor Plan
Treatment Area Design is An Art

ZIERING
1. Donor Harvest Options

- Microscopic Follicular Unit Transplantation (STRIP)
- Follicular Unit Extraction (FUE)
- Robotic FUE
A strip of tissue is removed from the donor zone in the back of your head where your hair is genetically programmed to grow for life and then the individual follicular units are dissected underneath a Ziering Scope.

The Ziering Tunnel Technique eliminates tension on the donor closure area.
Donor Harvest
Follicular Unit Extraction

Grafts are harvested individually with no linear incision. During (FUE) Follicular Unit Extraction the follicular units are harvested from the donor area individually using the ARTAS Robot or the manual SAFE System.

ZIERING
The ARTAS Robotic System
using sophisticated imaging technology and precision robotics

High-resolution digital imaging of each follicular unit for rapid, micron-level targeting accuracy

Image-guided robotic alignment for speed and precision beyond manual techniques

Minimally invasive dissection
Delivers clean, accurate, healthy, intact grafts every time with nearly undetectable harvest sites

Computer sensors monitor patient breathing and movements.
1171 Grafts

Donor Harvest
Follicular Unit Extraction (FUE)

No Linear Scarring with FUE

DAY 3

DAY 6

Month 5

ZIERING
Alternative FUE Donor Styles: Hair Above Previous Scar Untrimmed
Alternative Donor Styles: Midriff Cut

Total Grafts: 2017

ZIERING
Alternative FUE Donor Styles: Midriff Cut

Total Grafts: 2263
Microscopic Dissection of the Grafts

The Ziering Scope was developed to gain the best yield from the patient’s finite donor area, ensuring that these grafts remain healthy and vital while the ZM Hair Technicians separate them into their natural, transplantable follicular units of 1 to 4 hairs.

*The average person has 2.4 hairs per follicular unit graft*
Are your grafts “Ziering Certified”?

Ziering Certified Grafts:
Healthly surrounding tissue still intact

All patient grafts are carefully dissected under a microscope by a Certified Ziering Technician. Whether it is FUT (Strip) or FUT, all grafts are certified before being placed into your scalp.

Ziering Technicians have the most combined years of experience than any other hair transplant practice in the world.
3 Recipient Site Creation

Ziering Blade

- Allows grafts to be placed closer together, giving GREATER DENSITY in one session
- Diamond shaped design allows wide center recipient sites which PROTECTS the grafts and prevents compression of the grafts
- Smaller incisions for diminished scabbing & quicker healing
- UNPARALLELED PRECISION and gives control over the ANGLE, DIRECTION & ORIENTATION of each incision

Male Patient: Immediate Post-Op
Our staff have been hand selected and trained by a Ziering Certified Doctor.
Post Op Healing

2,175 Follicular Units (5 days Post Op)

Recovery times vary from patient to patient, redness of the scalp can last between 5-10 days. There is a less than 10% change of swelling, which normally occurs between days 3 and 5.

The optional Ziering Post Operative Package includes:
Complete Graftcyte Kit, Reusable Ice Pack, Comfort Pillow and 6 Laser Healing Sessions which can help speed up the recovery time, thus getting you back to your normal everyday activities sooner.
Hair Growth Progress

2,515 Follicular Units

Before

4 Months Post-Op

10 Months Post-Op
Hair Growth Progress

2,705 Follicular Unit Grafts

Before

5 Months After

9 Months After

ZIERING
The Ziering Whorl is a hair pattern classification system and an advanced surgical technique for restoring bald spots based on a scientific study with 534 patients.

- There are 5 discernible hair growth patterns: S, Z, Double SZ, Double S and Diffuse.
- Once the pattern is identified, the recipient sites are made, recreating a patient’s natural whorl pattern and working from the inside of the whorl outward to prevent the common and dated bull’s eye results.
- This technique gives a patient a denser, more natural looking result and represents the new standard for bald spot restorations.

*Dermatological Surgery Journal, August 2004*
Hair Restoration

Life Changing

Before and After Pictures
BEFORE

1171 Grafts

1 YEAR AFTER
Hairline Restoration

5 Months Post-Op: 1,924 Follicular Units
Hairline Restoration

12 Months Post-Op: 3,000 Follicular Units

Before

After

ZIERING
Female Restoration

Traction Alopecia

4.5 Months Post-Op : 2,657 Follicular Unit Grafts
Female Restoration

Bi-Temporal Recession occurs in approximately 80% of females with pattern hair loss.

Before

After
Ziering Whorl

9 Months Post-Op: 2,724 Follicular Units PLUS Finasteride

Before

After
Ziering Whorl

4 Months Post-Op: 1,500 Follicular Units
Hairline & Crown Restoration

14 Months Post-Op: 2,669 Follicular Units

Before

After

ZIERING