



# ESHRS

## Journal


THE NEWS LETTER OF THE EUROPEAN SOCIETY OF HAIR RESTORATION SURGERY

46, avenue Foch - 75116 Paris  
Tél. : 00 33 1 45 27 04 69 - Fax : 00 33 1 45 27 06 56

**Dr. Michael May**  
Editor's message

## Next congress in Lisbonne

### An opportunity to compare the quality of our work



*D*ear friends and colleagues,  
I would like to welcome you to our 12<sup>th</sup> ESHRS meeting held in Lisbon. We will discuss the most important topics in hair transplant surgery, there is even room for some controversy. The live surgery workshop will provide the opportunity to watch and question experienced surgeons and to compare the quality of our work. I know that the social program will

be memorable because it always is at the ESHRS meetings. I have never been to Lisbon but am greatly looking forward to my visit. I am sure that it will be an enjoyable and worthwhile break from the economic worries we are all experiencing.

I look forward to seeing you all in Lisbon.

Yours sincerely,

# CONTENT

---

President's message *Cover*

---

Editor's message *Page 3*

---

Hair restoration  
and aesthetic *Page 4*

---

Reconstructive surgery *Page 6*

---

Congress and live surgery  
Report *Page 8*

---

People in Madrid *Page 10*

---

Clinical case *Page 13*

---

Our everyday practice *Page 16*

---

Mail from our friends *Page 18*

---

Next Congress *Page 19*

---

Subscription  
Call for articles *Page 20*

---

## ESHRS<sup>®</sup> BOARD DIRECTORS

### PRESIDENT

Dr Michael May *United Kingdom*

### VICE-PRESIDENT

Dr Ramon Vila Rovira *Spain*

### TREASURER

Dr Patrick Frechet *France*

### SECRETARY

Dr Frank Neidel *Germany*

### PAST PRESIDENTS

Dr Patrick Frechet *France*

*founding president*

Dr Ramon Vila Rovira *Spain*

Dr Frank Neidel *Germany*

WINTER 2009 - VOLUME 1

## ESHRS<sup>®</sup> *Journal*

ESHRS Journal is the official  
publication of the European Society  
of Hair Restoration Surgery.

- The articles published are for educational purposes only.
- The opinions expressed are those of their authors.
- ESHRS is not liable for any claims that might arise from using the techniques discussed.

Copyright :

2001 by European Society  
of Hair Restoration Surgery  
46, avenue Foch 75116 Paris France.  
Printed in France.

ESHRS' Administrator : Alain de Neufville



**Dr. Patrick Frechet**  
ESHRS Founding President

## Happy ethical new year

**On behalf of my colleagues of the ESHRS board I wish you a very happy new year, full of joy and pleasant surprises. We wish you a very successful hair transplant practice and very satisfied patients. The 11<sup>th</sup> ESHRS congress and live surgery workshop last May was very well attended and from what we heard, all participants enjoyed both the scientific program and the elegant social events with the usual friendly atmosphere allowing everyone to make new acquaintances and friends.**

This year the 12<sup>th</sup> ESHRS congress and live surgery workshop will be held in Lisbon, the capital of Portugal from 28<sup>th</sup> to 30<sup>th</sup> of May featuring one full day of live surgery workshop followed by two days of conference.

As the previous years, the congress will include the latest techniques and innovations.

**Send us your abstracts if you wish to make a presentation**

The live surgery workshop will again be one of the highlights and a very unique experience to watch some of the world experts perform their favourite procedures. Doctors will have the possibility to watch the operations directly in the operating rooms and in the auditorium with live video transmission interacting with the surgeons. Live surgery workshop is certainly the best way to learn a technique as they are so many details to catch.

Last but not the least; we shall take great care of the social program to offer as usual events with a special flavour. I think ESHRS is also well renowned for these events.

Lisbon is a very charming city built on 7 hills, overlooking the Tagus River.

The weather is excellent and sunny at this period of the year

Portugal with over 20 centuries of history was one of the richest countries during the XV and XVI century and Lisbon was a major port and the starting point of great expeditions to the rest of the world including the new world.

Gothic cathedrals, watching the sunset from the Old Moorish Castles, museums, are all part of the colourful cityscape but the real delight of discovery lies in wandering in the narrow medieval lanes of Lisbon's lovely backstreets. Lisbon is also the place for popular festivities, exquisite shopping, and exciting nightlife, considered to be amongst the best in Europe.

During our congress we shall visit some of the marvels of Lisbon and listen to "Fado singing" and "guitar playing": night soul of Lisbon's inhabitants.

### Now speaking of a totally different matter

A few weeks ago, I was reading an airline magazine while travelling to a medical congress.

Inside I found an advertisement of a commercial hair transplant company. In brief the content was:

I am "so and so" one of the world's best experts in the field (never heard of!) and with my special technique there is no pain, no scar, no blade.

Is hair transplantation a surgical procedure or a magical procedure?

How do grafts move from the donor area to the recipient area?

By suction as some publicities pretend, or isn't a punch a circular blade as we all know?

I turned a few pages: same type of story by another company. This one pretending that they could perform more grafts than others with better density. Before the end of the magazine, there

was a third publicity. In this one the author was using exclusively the latest technique? Offering the best results ever, and allowing patients to be treated in one session for the rest of their lives. He also mentioned that all other techniques were totally obsolete.

There are unfortunately hundreds of such advertisements.

As a comment one may say: this type of advertisement has been going on for years, so what.

Another may say, it's a shame but what can I do.

I say and hopefully I am not the only one: Beware, this is extremely harmful. With this kind of advertisement we have all of the ingredients to make patients unhappy and dissatisfied. We also have all of the ingredients to make patients no longer believe in us and loose their confidence. Finally we have all of the ingredients to damage severely the credibility of hair restoration surgery.

This makes me think of the "subprime crisis" where so many bankers have fooled consumers who believed in them with finally the disastrous results we all know both for the consumers and the whole banking system (and more).

So that now governments are taking measures to reduce or eliminate this kind of wild behaviours.

I see no difference with what is happening in our field.

### I am ready to believe that Madoff is an angel compared to some hair magicians around

If we are not clearly aware and do not take the right measures, we will have nightmares soon or later.

Human nature is such that there will always be some unethical medical doctors or commercial companies behaving like crooks. If these crooks consider that they can continue without problems, they shall. As medical Doctors, we are not policemen, nor judges, but we still have ways to make crooks' lives harder, if patients are no longer fooled by misleading advertisement.

How? First of all most of what can be done is at an individual level. Behaving respectfully with our patients is the first step, but it is certainly not enough to make things change.

Each one of us can perfectly provide during consultation some basic information so as

...

- to correct these misleading advertisements. We can perfectly explain also that there is not such latest technique which makes all others obsolete, nor such technique allowing huge numbers of grafts to be done in one session without some risks involved such as lower rate of yield, wider scar etc. . .

Obviously, if only one doctor gives such information, it will be useless, but if a greater and greater number of doctors do so, little by little patients will become better informed, more aware and start to realize what is right and what is wrong. What is done at the individual level may also be introduced at a Hair Transplant society level.

On the other hand, consumers sometimes behave in such a way as to make physicians compete with one another. Some do not hesitate to say: "Doctor, I have been shopping around so tell me what would be your lowest price? Or the greatest number of grafts you can do for me".

### In my opinion this is no longer a Doctor/patient relationship.

It becomes a carpet dealer's bargain. I personally tell this patient: Dear Sir, instead of looking for the lowest cost you should maybe look for the best result as the result is for your lifetime. These are two totally different goals and my personal goal

is to offer my patient the best result I can. If the cost is a more important factor than the result itself then I would certainly advise him to search for a low cost Doctor. I would also point out that the final cost may be far more than expected, if the result happens to be far less than expected. On the other hand if a Doctor does not want to loose a patient, very well, but it should not be by lowering the quality of the end result.

There is a lot more to say, a lot more to do to improve the situation and reduce some unethical behaviours. If we don't do it ourselves, someone at a higher level will do it and in a far more coercive manner. ■

# Temporal Points: Our Experiences in Consideration of Æsthetical Aspects

Dr. Frank G. Neidel & Dr. Karin B. Leonhardt  
(Germany)

## INTRODUCTION

### Beauty – Attractiveness – Female

Last year we presented female patients with lowering of the frontal hairline in order to reconstruct facial symmetry. We found out that a symmetrical face with a beautiful hairline will make a woman look more mature and sexy.

What about men – how does the hairline affect attractiveness in men?

### Beauty – Attractiveness – Male - Questions

- Do men want to be beautiful?
- Do men want to be attractive to women? Why?
- Do men want to be attractive to other men? Why?
- Keywords to male "beauty": Attractiveness, Masculinity, Maturity, Competence, Health
- Aspects of a mans daily life:
- Competition: Career, work, sports, fitness- dating, mating, partners, family, friends

## KEYWORDS TO A MASCULINE, ATTRACTIVE FACE

### 1. The Golden Section / Proportio Divina

The unity of proportions:

minor : mayor = mayor : whole = 1 : 1,6

Examples go back to the ancient world, especially in architecture, but also in nature (flowers etc.). Famous examples are: the Parthenon, the Pyramids, Stonehenge. It has also been applied to the proportions of the human body (length of leg to length of body etc.) and can also be applied to the proportions of the human face.



Fig. 1 a, 1 b: The "Divine Proportion" in a male face

width : length of a face = 1 : 1,6

### 2. Symmetry in male faces, horizontally:

The forehead should be approximately one third of face, which is usually 7 to 10 cm from the eye-brows to the frontal hairline

### 3. Symmetry in male faces, vertically:

The forehead may be a little bit wider than the lower half of the face, but not too much

**4. Individuality:** It is considered attractive in a male face if it has recognizable features, something we will remember

**5. Familiarity:** We tend to like what we are used to, nothing wrong with being “average.”

**6. Features considered attractive in masculine faces**

- slender face cut
- not too much fat
- upper face half broader than lower face half
- high cheek bones, strong chin
- intact hairline
- With and without Temporal points



Fig. 2 a: Without temporal points



Fig. 2 b: With temporal points  
Which Figure gives better optical impression? See for yourself.



Fig. 3 a: Preop. Hairline design and slightly optimizing of temporal points.



Fig. 3 b: Intraop. situation, follicular units are placed.

**TEMPORAL POINTS - HOW TO DO - FEW FOLLICULAR UNITS - GREAT EFFECT**

- By using the key rules and technique pearls laid out by Melvin Meyer beautiful and natural results can be achieved
- Some of our own “keys” to success:
- Angle as steep as possible
- Direction always backwards/towards the ear
- Incision big enough to ensure “easy placing”
- Single hair grafts in the hairline (1 cm), then also 2 hair-grafts possible
- A density of 20/cm<sup>2</sup> is enough, more density does not improve result
- A total of 200 - 400 grafts usually are enough

**Step one:** Hairline design in consultation with patient under consideration of temporal points

**Step two:** creation of slits (angle!) and secure placing of 1 and 2 fu’s in hairline and temporal points, Minimal Change Makes a Maximal Effect for Patients



Fig. 4: Eight months after a temporal points transplant procedure. Only 1 and 2 fu's are transplanted, growth direction is parallel to the other hairs down- and backwards

**SUMMARY**

- Beauty in men has many aspects, our keyword could be “masculine features”
- Temporal points are important in order to achieve symmetry, masculinity and the divine proportion in a male face
- Better reconstruction of temporal points than transplantation of the vertex area (patient compliance! – explain this during consultation)
- T.P. do not require very many grafts or a very high density
- Ask your patient: he will most likely want it

# Crown reconstruction using scalp extension completed with a 4 hair bearing transposition flap

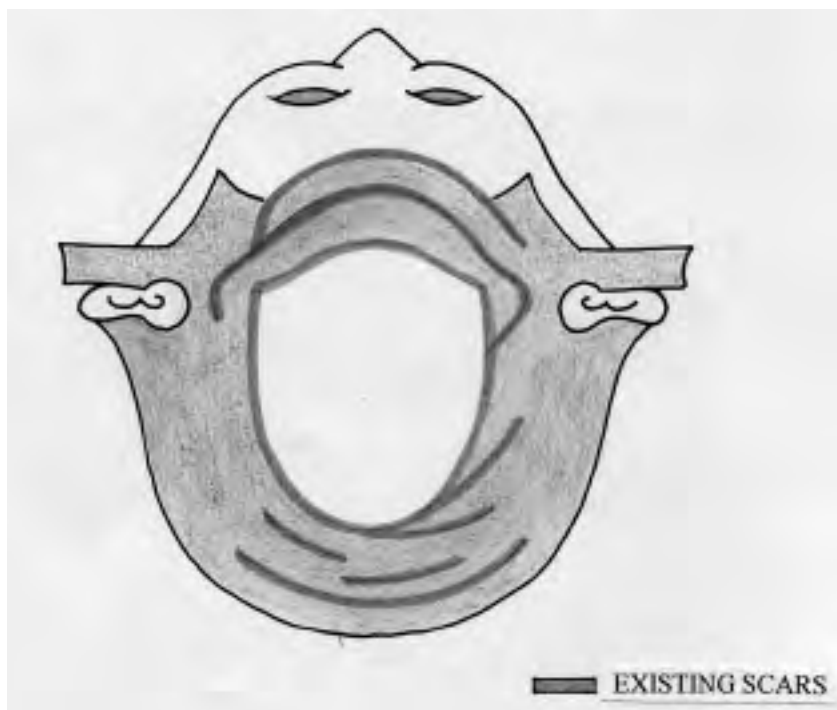
Dr. Patrick Frechet (France-Switzerland)

In this patient, due to his previous surgeries all the arteries and veins of the scalp had been cut. The presence of several scars and impaired blood vessels in this case presents a high potential risk of necrosis for flap surgery.

This risk is minimal when flap surgery is performed on a virgin scalp. The risk of partial flap necrosis averages today 1% of cases.

The patient is 40 years old. Ten years ago following the placement of 2 expanders he had 2 Juri flaps performed one behind the other, covering the whole frontal area on a width of 7 cm. He also had some grafts harvested in the occipital area using the strip method. The vertex and most of the occipital area are bald.

All the top and back zone of his vertex and occipital scalp above the scars has an abnormal blood flow. The superficial temporal arteries and veins, the post auricular, the occipital as well as the supra orbital and supra trochlear vessels had been previously cut off at one level or the other. (see the drawing and photos n°1 & n°2)



View of the existing scars before the reconstruction of the crown.

The blood flow to this poorly vascularised area is obtained by neo-vessels connecting vertex capillaries to the rest of the lower scalp.

The blood supply in such circumstances is considered to be far less efficient than usual.

## UPON WHICH CRITERIA THE SURGERY WAS DECIDED IN SUCH A CASE?

To summarize them:

- The quality of the previous Juri flaps showing no sign of vascular injury,
- The patient's good health,
- His practice of sports,



**Photo N° 1**  
Before treatment with short hair.

- The absence of vascular risk factors: normal blood pressure, no previous use of tobacco what so ever, normal cholesterol, etc....
- The special psychological demand of the patient
- This intelligent patient had also been extremely well informed of the potential risks of this surgery and the possibility of stopping the treatment at any stage in case of signs of necrosis.

3 days prior to surgery, the patient was given:

- Oral aspirin 500 mg daily and Pentoxifylline 400 mg (1 every 8 hours) every day for 13 days.

While performing the first scalp extension, an experimental flap cor-

responding to the 4/5th of the central ellipse of bald scalp to be excised, 13cm long and 3.5 cm wide, was performed. The quality of the bleeding of the flap edge was satisfactory. The incision of the tip of the flap as published previously also showed signs of normal bleeding, although anatomically speaking this flap entirely surrounded by scars had no significant vessels to feed it, except capillaries.

It should have shown signs of poor blood flow which it did not. This observation was a crucial indicator of the future potential positive result.

At this stage, the usual surgery went on with the excision of the total ellipse, undermining of the parietal areas, the placement of the extender and the suturing of the edges.

- The following days showed no signs of tissue vascular damages.

The same procedure was performed 6 weeks later with the same protocol for the second scalp extension as well as 7 weeks after for the quadruple Frechet flap used for this long slot. During the surgery the blood flow of

the flaps was normal with hoozing of the edges.

Post operatively there was no sign of necrosis. Minor telogen occurred along the edges of the third flap.

**QUESTIONS**

Did the medications play a significant role in the success of the procedure?

No definite answer can be given. Nevertheless, the author would not have performed this case without these medications and previous personal studies tend to confirm their usefulness.

Obviously, this surgery should not be repeated except in very special circumstances.

**IN CONCLUSION**

- It shows that the limits of flap surgery can be extended further

- It also shows that more efficient medications (vasodilators, anticoagulant, etc.....) may be very useful in everyday practice to reduce or eliminate the risk of necrosis. The author uses the present medications each time vascular risk factors are involved, especially for patients over 40 years of age. He also started to use more recently (Todalafil 20 mg orally before surgery) in an attempt to improve flap viability.

**Photo N° 2**  
Before treatment



**Photo N° 3**  
After 2 scalp-extensions



**Photo N° 4**  
Result after the quadruple Frechet Flap



# European Society of Hair Restoration Surgery 11<sup>th</sup> Annual Congress and Live Surgery Workshop

MADRID, SPAIN - MAY 24-27, 2007

**Dr Mark Di Stefano** (USA)

The 11th annual Congress and Live Surgery Workshop of the ESHRS was held in Madrid Spain. Arrival into Madrid was an unexpected pleasure. The city has been transformed over the last few decades into a centre of renaissance of the old with the new. The old palaces and hotels have all been cleaned and polished for the visitors to this unbelievably clean city. With a short car ride from the airport to our hotel, Hotel Ritz, it was like passing into a new age a new “old” age.. The elegance and luxury was what only the ESHRS could offer. The hotel was in the centre of the city. The service was the best we have had to day. The faculty included many of the world experts in hair restoration.

The sessions started on **Thursday, May 29<sup>th</sup>**, with Congress President **Ramon Vila Rovira** welcoming the attendees.

Dr. Frechet was next with his warm welcome to everyone in attendance and giving some background of the past 11 years of the ESHRS as well as looking to the future.

With the welcome and introductions complete, the lectures immediately followed.

The **first session** included an important topic by **Dr Sharon Keene** (USA) on “The Approach to the recipient area.” Her presence was missed at this conference, as she could not attend due to a last minute family emergency. Dr Leonhardt kindly delivered her talk, followed by “Hairline reconstruction in women”, by Frank Neidel of Germany. He explained the how and why to design the female hairline. His practical approach made it easy to follow the how and whys of the female hairline. How the shape of the face, location of the eyebrows and hairline make a signifi-

cant impact in the overall picture. He explained that attractiveness is correlated with the symmetry of the face for the brain and associated with genetic, physical and mental health.

Next **Karin Leonhardt** (Germany) gave an excellent talk on the reconstruction of the temporal peaks. Explaining the reasons for the process and how it should be done, landmarks in the approach and how to fill them in properly. She mentioned that temporal points offer more symmetry to the face and frames it totally.

**Patrick Frechet**, France and Switzerland, spoke on his vertex treatment with the Frechet Extender and the triple flap stating that in combination with grafts, it is the only way to obtain a full head of hair in patients who have reached stage V and VI. It looks so simple in his hands; one wonders why more doctors are not offering this to their patients. The results are outstanding. But not as easy as it looks. Experience is a great teacher.

He also emphasised why vertex baldness should not be transplanted in

patients under 50 years of age, showing photos of the anaesthetic results later on due to the progression of the baldness with often no hope of correction.

In the **afternoon session** the minimal or invisible scar closure was discussed by **Patrick Frechet**, with its 4 major closure factors. This was insightful discussion as to why his closure gives the least noticeable scar. He mentioned that trichophytic closure with deepithelialization of the upper edge alone is useless and trichophytic closure with deepithelialization of the lower edge is no more efficient than supra galea undermining alone.

**Begona Barros** (Spain) summarized the results from her 25 patients study comparing invisible scar closure using the 4 major closure factors performed on the left side of the wound versus conventional closure on the right side. It is apparent from this study that the invisible scar closure is the closure of choice, with the results being from good to outstanding with an undetectable scar in most cases. On the other hand there was more discom-

fort initially with blush and itching. This was followed by **Jorge Gaviria** (USA, Spain) on an update of the largest study involving 6 other physicians and over 500 cases of minimal or invisible scar closure versus conventional closure update. The evaluation was done by an independent physician again, the winner is the minimal or invisible scar closure with wounds up to 1.3 cm wide. More inflammatory reactions at first were also mentioned.

Later that afternoon, **Alex Ginsburg** (Israel), discussed a new method to implant FU's. This novel approach allows the nurse and doctor to detect which incision matches the 1-2-3 hairs. It will be something that many of us will try in the future.

**Demir Ilter** (Sweden) showed his results of the FUE megasession. He also discussed the differences between FUE and conventional FUT.

**Ekrem Civas** (Turkey) discussed 3 tools to dissect the FUE, and re-evaluating the limitation and candidate selection.

**Rana Muhammad Irfan** compared the Big FUE session and conventional strip method. Noting some of the differences and difficulties between the two.

**Mark Di Stefano** (USA) discussed the use of body hair in FUE and why this resource should be used. The body gives another whole source of hair for us to use. He also gave Sharon Keene's second lecture on the new Genetic Screening test for AA. (Although I tried, I could not deliver the information with the same authority and knowledge that we have become accustomed to from **Sharon Andrea Finner** (Germany) gave an overview of the evidence of hair restoration surgery. Supporting the need for randomised controlled trials

in the field of hair restoration surgery especially for the evaluation of hair growth to be able to make treatment choices and decisions.

**Fernando Basto** (Brazil) gave his talk on dorsal Decubitus and the major interest to keep the second half of the donor ellipse uncut while preparing the first half for FU Survival by avoiding the harmful effect of air environment as well as safety for the patient. This was a stark exposure to the safety and concerns of our patient.

**After the scientific sessions**, a group went and toured the Royal Palace. This is what old Madrid and Europe was like. It was a guided visit to a special place. Everyone who went was mesmerized and impressed.



Later that evening the fun began with the **welcome reception at the Ritz** in the Alphonso XIII room. This is the real reason we all go to these meetings !!!!! The hotel was simply splendid. The evening was full with new people becoming acquaintances, acquaintances becoming friends, this went late into the evening with drinking, talking and renewing friendships.

**On Friday**, The sessions started with **Bijan Feriduni** (Belgium). He

spoke on complications of dense packing. The complications are real and can have a significant impact on the results. He also showed some complications of the trichophytic closure, although they do not happen often.

**Jorge Gaviria** (USA, Spain), spoke about conventional closure and minimal or invisible scar closure. The complications and cultural implications. The different ethnicity and how it affects outcome.

**Iqbal Shamalak** (United Kingdom) gave his experience with the multiple scars problem and how he handles them. He mentioned the role of massage 4 weeks before surgery, the need of large amount of tumescence prior to superior and inferior undermining and the two layer closure. The best way is to try to avoid them.

**Philippe Parraud** (France) discussed donor area, planning a case and management of a bad scar.

Under special presentations, **Professor Jose Francisco Rodrigues Vasques** (Spain) discussed the anatomy of the scalp.

**Enrique Poblet** presented an innovative 3 dimensional histological study of the erector muscles and their possible mechanical implication in the secretion of the sebaceous glands.

In the **afternoon sessions** the discussions of complications and reconstructive surgery was introduced by **Ramon Vila Rovira**, (Spain), who discussed the use of FU in scars combined with scar revision and their management in many different types of scarring alopecia. He also discussed the role of expanders in hair restoration surgery in wide burns as well as wide scalp defect related to trauma.

**Carlos Velasco De Aliaga** discus-



Mrs. Wakako Yagyu, Dr. Patrick Frechet, Dr. Isabel Banucci



Dr. and Mrs. Radha Naidu, Dr. Michael May, Dr. Kuniyoshi Yagyu



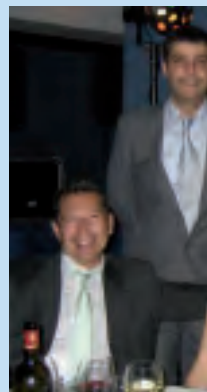
Mrs. Karina Repetto, Dr. Karin Leonhardt, Dr. Karl Deidehoff, Dr. Cordula Kerner, Dr. Andreas Finner, Dr. Danuta Sobzack, Dr. and Mrs. Michael Pees, Dr. Ranko Pavlovic, Dr. Frank Neidel



Dr. Ahmad Hosseinpour, Dr. Mohammad Khalil, Dr. Farah Aleghais, Dr. Mohsen Proozhashemi, Dr. and Mrs. Demir Ilter, Dr. Geza Sikos and his daughter



Dr. and Mrs. Patrick Frechet, Prof. Maurice Mommearts, Dr. and Mrs. Kuniyoshi Yagyu, Dr. and Mrs. Mark Di Stefano, Dr. Philippe Parraud



Dr. Gwen Swennen, Ginzbe

NB : A mistake was made in the previous issue : Please read Dr. Farah Aleghais and Dr. Ahmad Hosseinpour instead of Dr. & Mrs. Ahmad Hosseinpour.



Dr. Carlos Velasco de Aliaga, Dr. Begona Barros, Dr. Montse Folch, Dr. Isabel Banucci, Dr. Victor Vallero Meza, Dr. Khalil Jebai, Dr. Ramon Vila Rovira, Dr. Monica Rolando Damevin and her father



Mrs. Jaleh Frechet , Dr. Marta Ragiotti and her daughter, Mr. Alain de Neufville, Dr. Philippe Parraud



# LE gress in Madrid



Dr. And Mrs. Kuniyoshi Yagyu, Dr. Cordula Kerner



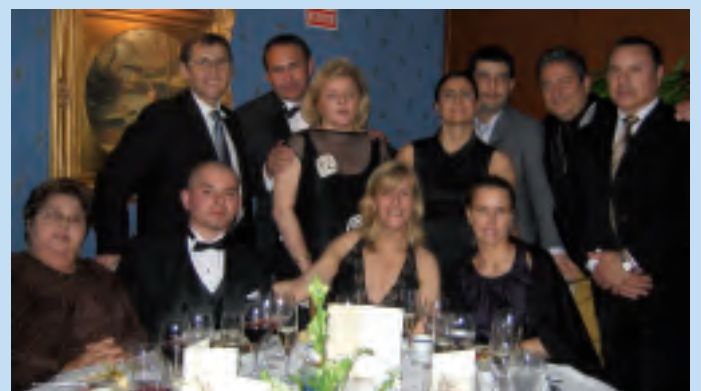
Dr. Feriduni's Assistants, Dr. Gehrig's Family, Dr. Gwen Swennen, Dr. Bernard Morenhout, Dr. and Mrs. Bijan Feriduni



Dr. Ekrem Civas, Dr. and Mrs. Alexander Goncharov, Dr. Michael May



Dr. and Mrs. Patrick Frechet , Dr. and Mrs. Aydyn Rasulov



Dr. Mauricio Mora de Miranda and his mother, Dr. Ana Trius Chassaigne, Dr. Riikka Veltheim, Dr. Emilio Villodres, Dr. and Mrs. Alberto Gorotchateguy, Dr. Alba Veronica Puddu, Dr. Ekrem Civas, Dr. Jorge Gavirai, Dr. Mario Sarden

sed and displayed the correction of "surgery gone badly". He presented exceptional results due to his meticulous approach and perfectionism.

The same holds too with **Kuniyoshi Yagyu** (Japan). He showed his way of treating scarring alopecia after the use of artificial hair on 24 patients. The successful results in his opinion are related to many factors including: Removal of all artificial hairs 1 month before grafting, standard density of grafts, acute angling of the incisions and direction of slits parallel to the supposed vessels, less epinephrine.

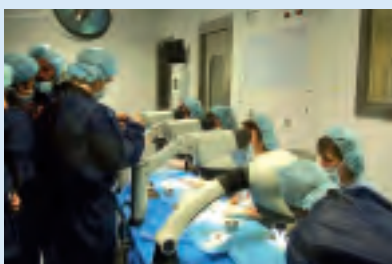
**Geza Sikos** (Hungary) discussed hair restoration in non androgenetic alopecia.

**Patrick Frechet** (France) talked about the treatment of extensive burns in cicatricial alopecia and the importance of eliminating scar tissue each time possible; the role of extenders or expanders and the major role of the triple flap to avoid hair distortion and offer a natural end result.

**The last session of the day** was the Presentation of the treated patients, which has become very popular and is used at all of the major conferences now. **Doctor Monica Rolando Damevin** showed some very nice results of hair transplantation of the frontal and mid-scalp. Late in the afternoon, there was a **pri-**

**vate tour of the World famous Prado Museum.** It was an excellent way to escape all of the business of the conferences. The tour was delightful.

Later that night, a **dinner** was held at a typical and famous local restaurant, called Casa Lucio where the Royal Family comes from time to time we



enjoyed a typical Spanish dinner. The restaurant was full and after dinner some continued the evening with drinks in the neighbouring bars or flamencos.

The next morning, we all headed across Madrid to the surgical centre.

**The live surgery** was set up on one floor in several OR's and there was a live video feed into the lecture hall, 2

floors up. Each session had a moderator; all of the attendee's were allowed to walk through the ORs. It was a very intimate setting allowing us to see the surgery, close up and with immediate access to the surgeon.

Minimal or invisible scar closure, placement of extenders, triple flaps, scars revisions FU's, FUE's were demonstrated on male and female patients. The surgical sessions were able to show how the lectures fit with the program. The practical aspect of the surgery was easily seen and demonstrated. Even with the more complicated cases, the audience was able to see the exacting detail up close and personal.

**Saturday evening** was the pinnacle of the conference. Even though we thirst for knowledge, we thrive on wine food and friendship. There was plenty of that on Saturday Night. The food was great, the setting was elegant and the friends were the BEST!

The wine was flowing and after dinner the feet were dancing. There was a party going on, and most stayed until the end. It was a great party.

**The surgical sessions** continued on Sunday until the afternoon when it was time to say good bye.

It was an excellent conference with great surgery in a wonderful setting. It will be tough to top next year!

## Study of the FUE transection rate

It has been possible to evaluate the transection of follicular units in one of the two FUE cases performed during the Madrid Live Surgery Workshop. 4 independent physicians did the counting.

An average of 37 % transection was noted.

Compared with the few other reports published, this rate is in the same range.

It appears that FUE produces in general a much higher rate of transec-

tion than all other harvesting techniques.

Improvement in FUE transection rate is a must.

Otherwise it may not be considered an advisable hair transplant technique.

# Treatment for Alopecia after Artificial Hair Implantation: Standard Density Hair Transplantation for Scarred Alopecia with Persistent Infection

Dr. Kuniyoshi Yagyu (Japan)

## ABSTRACT

**Long-term consequences of prosthetic hair implantation for MPHL or burn scar are still disappointing because of deep infection, tissue inflammation, scarring and alopecia in the recipient scalp. Hair transplantation in such an area often results in poor hair growth. Following careful strategies of treatment, implantation density of 25-50% using FU and double FU grafts has become possible even for scarred alopecia with infection after repeated artificial hair (AH) implantation.**

## INTRODUCTION

Deep implantation of AH fibers causes inflammation and infection in the deep scalp tissue. After repeated AH implantation, persistent infection causes scarring and alopecia of the scalp with reduced blood supply. These factors cause poor hair growth after the hair transplantation. Lower density hair transplantation is usually recommended for cicatricial alopecia. However, it isn't often that patients are satisfied after repeated sessions of low density implantation. In order to obtain satisfactory results in one or two sessions, standard density transplantation is crucial. This is the background why the author wanted to propose useful strategies of treatment for scarred alopecia with persistent infection.

## PATIENTS

The author has experienced 53 hair transplant operations in 33 patients with alopecia after repeated AH implantation for these five years. The average age of the patients was

44.5±9.8 years old (mean±SD), 32 of them were males and one was female. Their primary concerns were MPHL, FPHL and burn scar. Some examples of the patients are shown here.

## CASE 1.

41 years-old male with MPHL had experienced 20 operations of AH implantation for ten years. He had

become totally bald from the front to the vertex. His scalp had become atrophic, thin, fibrous, and hard scar with innumerable pitting. His glossy thin scalp looked like vinyl or plastic (Fig. 1).

## Figure 1

**Case 1. 41 years old male had suffered from wide alopecia from the front to the vertex after 20 operations of AH implantation. His scalp had scarred and atrophied with innumerable pitting.**





**Figure 2**

**Case 1.** After the transplantation of 3,542 grafts in two sessions, the patient was happy and satisfied with the results.

In order to hide the wide scarred bald area, two hair transplantation sessions with standard transplant density were planned at an interval of one year. In each session, 1,740-1,802 grafts were transplanted from the front to the vertex with average density of 25%. A total of 3,542 grafts in two sessions consisted of 80 single-hair grafts, 1,200 two-hair FU grafts and 2,262 double FU grafts. Cold HypoThermosol FRS solution was used as graft storage solution at the 1st session, and chilled saline was used at the 2nd session. Mean graft ischemic time was 1.9-2.2 hours.

Hair growth after these two sessions was satisfactory as usual operation. One year after the 2nd session, he was happy and satisfied with the density of newly regrown hair (Fig. 2).

#### CASE 2

31 years-old female complained of slight decrease in hair volume in the front area. She was not bald before operation. She only wanted to increase hair volume. However, after four operations of AH implantation

for three years, she had lost most of her hair in the front area (Fig. 3). The scalp had become atrophic, thin, fibrous, hard and erythematous scar tissue with multiple pitting and serous exudate. As you can see in this photo, the square shaped baldness in the front area was unnatural and artificial. Before the hair transplantation, all residual AH fibers had to be removed. We waited one month for cure of persistent infection (Fig. 3).

One month after the removal of the residual artificial hairs, the 1st session was performed and 1,330 grafts were transplanted with average density of 36%. The grafts were consisted of 60 single-hair grafts and 1,270 two-hair FU grafts. The grafts were stored in chilled saline, and the mean graft ischemic time was 1.8 hours.

Her front area looked natural again one year after the 1st session. She was



**Figure 3**

**Case 2.** 31 years old female had lost most of her hair in the front area after 4 operations of AH implantation (left). The scarred and atrophied scalp had multiple pitting and serous exudate. All residual AH fibers had to be removed from the front area. She waited one month before the session (right).

happy and satisfied with the density of newly regrown hair (Fig. 4).

### RESULTS

Density of hair transplantation was 25-50% and the mean density increase was  $28.8 \pm 5.4\%$  (mean  $\pm$  SD) in 53 operations. Dense packing of 50% density was performed in 2 cases. The average area of transplantation was  $89 \pm 32$  cm<sup>2</sup>. The average number of total grafts was  $1,281 \pm 358$  grafts. Combination of FU grafts and double FU grafts was used in 48 operations (91%), and FU grafts without MFU grafts were used in 5 operations (9%).



**Figure 4**  
Case 2. One year after the transplantation of 1,330 grafts in one session, she was happy and satisfied with newly regrown hair.

The mean graft ischemic time was  $108 \pm 34$  minutes in 53 sessions. Cold saline solution was used as graft storage solution in 48 sessions (90%), cold HypoThermosol FRS solution was used in 4 sessions (8%), and cold Belzer University of Wisconsin solution in 1 session (2%).

Patients in this study were satisfied with the density of newly regrown hair after one or two sessions (mean  $1.6 \pm 0.7$  sessions).

### DISCUSSION

Strategies of treatment for scarred alopecia with infection after repeated AH implantation are as follows in our clinic.

1. All residual AH should be removed one month before the hair transplantation in order to cure persisting infection in the recipient area.
2. FU grafts and double FU grafts were used with satisfactory hair growth in a larger session in my experience. Standard density implantation was possible. Even dense packing was possible. The recipient sites could be spaced apart as in usual patients. Even if slits were not bleeding, the transplanted hair grew provided that serum exuded from slits.

3. Angle of slits should be acute angle in thin scalp tissue. In very thin scar tissue, the incisions should be made at a more acute angle in order to increase the depth of the incisions and create a pocket to house the graft.

4. Small amount of tumescent solution was helpful in increasing the skin thickness and alleviating the problem of shallow slits, if injection was possible in the scar area. If

injection of tumescent solution was difficult in the hard scar with tight adhesion to the cranium, only ring block anesthesia around the scar was performed without injecting tumescent solution in the recipient area.

5. Amount of epinephrine should be reduced in the tumescent solution because of the reduced blood supply in the scar tissue.

6. Direction of slits should be kept parallel to the vessels under the skin in order to prevent vessel injury and to prevent ischemia in the poorly vascularized tissue. Sagittal slits were mainly used in the frontal and mid-scalp areas. Lateral slits were used in the temporal and parietal areas. Radial slits from the whorl was used in the vertex area.

7. Short graft ischemic time seemed to be very important in the recipient area with reduced blood supply. Graft storage solution may be helpful if graft ischemic time may become longer.

8. Interval between sessions should be longer than that in normal scalp without infection or scar. In order to avoid possible dislodging of the grafts or poor hair growth, we should wait at least one year before proceeding to the next session.

9. These strategies were applied successfully to other hair transplant sessions for cicatricial alopecia by other causes. Standard density transplantation or even dense packing was also possible in such cases.

### CONCLUSIONS

Following above-mentioned strategies, hair growth was satisfactory after the hair transplantation for alopecia in patients after repeated AH implantation. Increase in density of 25-50% (average  $28.8 \pm 5.4\%$ ) was possible using FU and double FU grafts irrespective of scar and infection in the recipient area.

# FUE for Undesired Grafts shortly after Hair Transplantation: How and When?

Dr. Bertram (Thailand)  
 Dr. Pathomvanich (Thailand)  
 Dr. Laorwong (Thailand)

## Introduction

Many articles commented on the different ways in preventing postsurgical grafts dislodgement. This one mentions the opposite – how to get them out.

Hair line design is an important part of Hair Restoration Surgery. The doctor identifies minimal and maximum safe limits. The patient's desires will determine which hairline design within those limits will be used (1). A mutually agreed plan should be arrived before surgery.

On occasions patients may, commented by family or friends, change their mind about placement of hairline soon after surgery. What are the options? If they insist of removing the undesired grafts, when and how should they be removed?

This article is to share our experience on these issues.

## Objective

A case report to study the different ways in removing undesired grafts 5 days after hair transplantation.

## Case description

A 27 years old Asian female was distressed by her 'big face', and requested to lower her fronto-temporal hairline to make the face "smaller". She was pleased with the new hairline design before signing the consent. 2,898 grafts (4,665 hair) were transplanted in one session. 22G needles were used to create 300 lateral slits for the one-hair FUs, while 20G were used to make 950 slits for the two-hair FUs. Needles of the same gauge were used to stick-and-place the remaining grafts for dense packing.

2 days later she returned expressing distress after being told by friends that the new hairline did not match her face. On day 5 she insisted on removing the first centimeter of hairline. The procedure was carried out same day.

## Methods & Material

The patient lied supine with eyes covered. The area was marked (Figure 1)

and anaesthetized with 8cc of 1% xylocaine with adrenaline. A nurse skilled in graft-insertion with forceps; and a doctor trained in FUE – were assigned to extract the follicles simultaneously. Jewellery forceps straight and curved were used with 2X loupe-magnification. Different techniques were tried and compared. All removed grafts were examined and counted.

## Results

Crusts were seen embracing the grafts. There was no inflammation or swelling. Grafts appeared to adhere strongly to the recipient slits as gentle rubbing did not dislodge any. Jewellery forceps were required for their removal.

Four techniques were tried:

1. The tip of hair shaft was simply grasped and pulled. This method was abandoned after a few trials as most removed were just shafts without dermal papilla.
2. The graft was grasped lower by the crust. On pulling, the crust came off with hair attached. The result was slightly better but

over half still had no papilla.

**3.** Our usual FUE technique was then applied - a pair of curve forceps was used to compressed the skin around the graft, while another pair of straight forceps was waiting to grasp the popped up follicles. Nothing popped out. Not a single graft was removed by this method.

**4.** The crust was first removed by the tips of the forceps. The exposed upper dermis was then grasped firmly and pulled gently. The majorities of the pull-outs follicles were intact. This 2-steps approach was used by both to remove all remaining grafts.

Post-extraction bleeding was minimal and controlled by direct pressure. 28 hairs, removed mainly by method 1 & 2, had no dermal papilla and were discarded.

A total of 286 intact grafts were removed, including 258 one-hair and 28 two-hairs follicular units (**Figure 2**). They were re-implanted into the anesthetized frontal and temporal regions to add density.

No dressing was applied. The patient was asked to follow the same postoperative protocol. Regular visits have been arranged to check for post-extraction hypo or hyperpigmentation.

## Discussion

In the recipient area a coordinated series of events starts right after making sites. They play key roles in initiating and sustaining the phases of acute tissue repair. The following histological features were reported on day 5 after surgery (2):

1. Subsiding tissue edema;
2. Overlapped inflammatory and proliferative phases characterized by clot formation; deposition of fibrin; and influx of fibroblasts, epithelial cells as well as inflammatory cells to the areas;
3. Early revascularization;
4. An increasing level of multiple cytokine growth factors (GF) such as platelet derived

GF, transforming alpha GF, transforming beta GF, epidermal GF, and vascular endothelial GF; Hematoxylin & Eosin, Factor VIII, Collagen III and IV, and CD 31.

This case report demonstrated that graft-tissue adherence from the acute



**Figure 1**



**Figure 2**

wound healing process can resist dislodgment -- grafts did not pop out by gentle rubbing or forceps compression. Simple grasp-and-pull removed only shafts and 2-step technique was required to obtain intact follicles. Any undesired grafts

after surgery should therefore be removed as soon as possible once the patient expressed the need.

This study carries another implication in postsurgical shampooing (PSS) of the recipient site after hair transplantation. Crusts (3) are coagulated serum and blood that seep from around the grafts in the first 24-48 hours after surgery (4). Mingled to the hair, they may dislodge a graft if caught on a fingernail or comb. Dislodged follicular unit grafts dry quickly and do not survive long enough to be re-implanted.

Important in removing crusts (3), PSS was commenced in most clinics the day after surgery. There is however diverse opinions about rubbing the grafts while shampooing. Some regarded this as one of the main causes of dislodged grafts (5), and should be avoided on the first 10 days (4). Other recommended massaging the recipient area with olive oil as early as day 4 (6).

We observed that the transplanted grafts well settled in the recipient site on day 5, if not earlier. Gentle rubbing from this day onward should have a minimal risk in dislodging transplanted grafts, and can be included in PSS to prevent building up of crusts.

## Conclusion

Any undesired grafts should be removed as soon as possible. A 2-steps technique is recommended:

1. Remove the crust by the tips of straight jewellery forceps.
2. Grasp the exposed upper dermis firmly and pull the graft out gently.

Early finger tips massage is unlikely to dislodge grafts and can be included in the PSS protocol to reduce crusts after hair transplantation.



“**Congratulation** for the Congress in Madrid. I was very happy to have participated in this event and I confirm my participation in the congress of the next year.”

*Doctor Fernando Basto* (Brazil)



“**As part of our honey moon** we spent a great deal of time at the ESHRS Madrid congress. The social program as usual is the greatest of all. Great visits to the world milestones, great meals, lots of laughs, and dancing and happiness, what a great time. We made great contacts, met with friends, and started a couple of new friendships. From the deepest of our hearts, thank you.”

*Doctor Jorge Gaviria* (USA) and *Doctor Ana Trius Chassaigne* (Spain)

“I would like to thank you again for the choice of the social program. **We enjoyed the setting and gastronomy.**”

*Professor Maurice Mommaerts* (Belgium)



“**Congratulation for your congress.** I liked very much Doctor Frechet’s presentations and I have become a fan of the Frechet Extender and the triple flap. **Congratulation also for the superb social program.**”

*Doctor Gwen Swennen* (Belgium)



“I appreciate your warm hospitality that made my stay **unforgettable.** I hope your meeting will be as effective as this, next year”

*Doctor Moshen Piroozhashemi* (Iran)



*Ellis* INSTRUMENTS, INC.

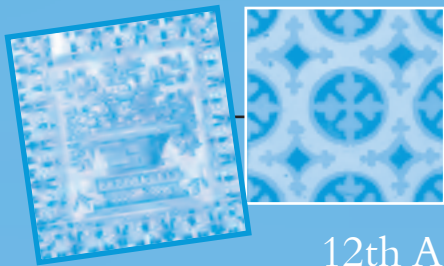
21 COOK AVE.

MADISON, NJ 07940, USA

TELE #973-593-9222 - FAX #973-593-9277 - E-MAIL : cellis@nac.net

www.ellisinstruments.com

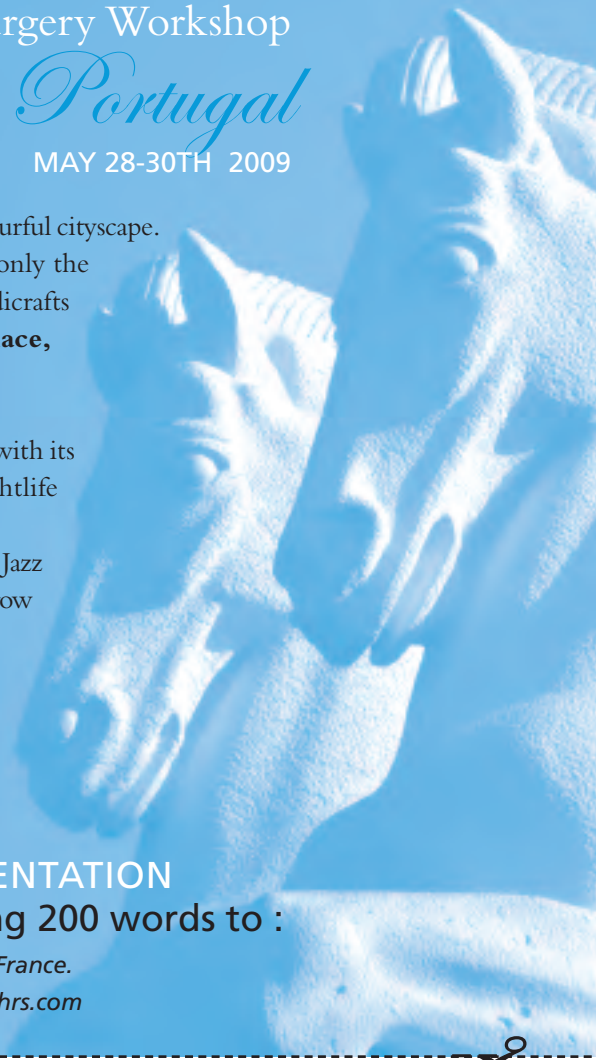
STATE OF THE ART INSTRUMENTATION FOR  
HAIR RESTORATION SURGERY!



NEXT CONGRESS

# Make sure not to miss 12th Annual Congress and Live Surgery Workshop *Lisbon, Portugal*

MAY 28-30TH 2009



We are pleased to announce our next Congress to be held in Lisbon starting with one day of Live Surgery Workshop, followed by two days of conference presentation, demonstrating **the latest and major techniques in Hair Restoration Surgery.**

It is a great opportunity to learn from some of the foremost surgeons in the world. A city full of contrast, Lisbon, capital of Portugal, spreading across **seven hills and overlooking the river Tagus** is a legendary city with over 20 centuries of history, appreciated for its charm and inviting warmth.

**Gothic Cathedrals**, quaint museums, majestic monasteries such as the Jeronimos, a masterpiece of **Manueline architecture** classified in Unesco's International Heritage list, the Belem

Tower are all part of the colourful cityscape. Shopping is exquisite, not only the famous brands but also handicrafts such as **embroideries, lace, pottery, Azulejos** etc...

The region is a fish heaven with its beautiful beaches, and nightlife exciting.

Discos, restaurants, bars with Jazz and Fado Houses line the narrow streets, partying until dawn.

**And just outside Lisbon there's so much more to explore !**

IF YOU WISH TO MAKE A PRESENTATION  
please send your abstract, not exceeding 200 words to :

ESHRS 46, avenue Foch 75116 Paris - France.  
Fax : 00 33 1 45 27 06 56 - E-Mail : eshrs@eshrs.com



## APPLICATION FORM FOR MEMBERSHIP

ESHRS

European Society of Hair Restoration Surgery  
46, avenue Foch 75116 Paris - France.

Tel. : 00 33 1 45 27 04 69- Fax : 00 33 1 45 27 06 56

Please enclose a photocopy of your Medical  
License to be registered

The yearly dues for Membership is : 425 €  
An invoice to be paid will be sent to you after acceptance.

Name

Address

City

State

Postal Code

Country

Phone

Fax

Medical Licence N°

