

Report of the 6th AAHRS Annual Scientific Meeting and 3rd CAHRS Annual Congress On May 11-13, 2018 at Beijing International Convention Centre, Beijing, China

D. Pathomvanich MD FACS, B. Ng MD FISHRS

Asian Association of Hair Restoration Surgeons (AAHRS) and the Chinese Association of Hair Restoration Surgery (CAHRS) had decided to hold a joint meeting in China, in order to introduce the state of the art in hair transplant technique into China.

27 Overseas and 4 local speakers were specially invited to share their thoughts and experience. There were altogether 497 attendants, 30 posters presentation and 47 exhibits.

Day 1 Friday, May 11

The Chinese leaders YiLin Cao, ShuZhong and Guo, Bin Zhang hosted the Opening Ceremonies. Our AAHRS President Kenichiro Imagawa, and the CAHRS president, Jufang Zhang, presented the welcoming speeches on behalf of their societies. WenYi Wu and Damkerng Pathomvanich gave the Chairman messages how the joint meeting were planned and finally took place in Beijing.

The Guest of Honour Lecture

Dr Walter Unger gave 30 minutes talk on "What I Have Learned in 50 Years of Hair Transplanting". On mentioning the Safest Donor Area, he estimated that the number of lifetime follicular units in a 30-year-old Caucasians is about 4900-7900 grafts in a Norwood Type V; and about 4,200-6,600 grafts in a Type VI.

Regarding the current Hair transplant controversy **of FUE vs. FUT**, Dr Unger commented that both have their advantages. Without suturing, FUE has better wound healing without leaving behind a long linear scar. In addition, FUE meets the general public demand towards minimal invasive procedure. In FUT there is a lower transection rate of follicular units resulting in more growth of the transplanted hair. Also a very fine linear scar can be achieved by using his two layers closing technique. He summarized by saying that the best approach would be to use FUT in the first session. In subsequent sessions FUE can be used to obtain more grafts, from scalp or beard, to further improve the result, especially in the very young and with poor prognosis.

When making Recipient Site Incisions, Dr Unger emphasised that the hair direction should follow the angle of existing hair, not the angle of how it is groomed. Hair anterior to the vertex transition point should point forward, with the angle becoming more acute as it moves forward. At the anterior hairline the hair should essentially lie

horizontal to the ground, regardless of the slope of the forehead.”

Because of the limited supply of “permanent” FU, It is always important to save FU for future use. This can be achieved by lowering the Recipient Site Graft Density and increase Graft Survival Rates. According to his experience, “dense packing” of more than 35 FU/cm² in general is not recommended, and in fact not necessary in achieving good cosmetic results. Graft survival is the result of a combination of multiple factors, and it should be better today because of a number of innovations such as more optimal holding solutions; implanters that allow for less graft handling; concomitant PRP; reduced graft out of body time; and more experience of the surgeons and assistants.

Richard Sheill made complement to Walter Unger by warning the audience to watch out for patients who have Body dysmorphic disorder. These patients will not be happy whatever what the doctors have done.

Basic Science Session

It was moderated by Wen Yu Wu and Ding Quan Yang. Francisco Jeminez talked about “How to isolate eccrine sweat glands from the follicular units transplanted graft”, but not sure the role of eccrine gland in hair transplantation. Ratchathorn Panjaprateep spoke on Hair Regeneration with autologous scalp tissue suspension and showed nice result in many patients. LuJun Yang spoke on “The application of supernatant of HuMSCs cultivated in stratified status in hair loss treatment” Qian Qu talked on “Identification of functional patterns of androgenetic alopecia using transcriptome profiling in distinct locations of hair follicles”. He concluded by saying that the self-assembled stratified 3-D structure, HuMSCs, presented an elevated growth factor secretion profile when compared with monolayer culturing. These elevated growth factors along with the nutrients in the supernatant might have contributed to normal hair growth.

Kuniyoshi Yagyu gave a talk on “Pre and intraoperative care in hair transplantation”, advising doctors should anticipate possible cardiovascular risk by keeping hemodynamic parameters stable, and by continuing any maintenance drugs such as antihypertensive drugs, anti-arrhythmic drugs, vasodilator, sedatives, and others. Operation should be postponed when HR > 140 bpm; HR < 50 bpm; SBP > 180 mmHg; or SBP < 90 mmHg. Contraindications to operation are SBP < 90 mmHg and HR < 50 bpm.

Medical Management Of Hair Loss

Moderators were Wen Yi Wu and Xin Dong Li. Ken Washenik's talk “Emerging therapy

for the treatment of AGA “ made comments on follicular cell culture, autologous fat transfer, prostaglandins, topical androgen blocker, JAK inhibition, finasteride and minoxidil. Mario Marzola spoke on “Reversal of the miniaturization of the hair follicle if the holy grail“ by using minoxidil, finasteride, stromal vascular fraction and fat transfer in an attempt to reverse miniaturized hair back to terminal hair. Jennifer Martinick’s topic was on “The role of LLLT in hair loss and post-operative treatment“

Hair Line Design In Asians

The Moderator were Russell Knudsen and Zhi Qi Hu , and the PANELS were Bertram Ng, JinRan Lin, Parsa Mohebi, and Piero Tesauro. Four patients had their hairlines drawn by all the panels the days before with before and after pictures taken. JinRan Lin won the best hairline design by majority voted.

John Cole followed by his brief talk on “The way to verify hairline symmetry“. Carlos Puig spoke on “What’s New in Hair Transplantation in Western “. He mentioned that “cryopreserved hair follicles“ can be used in the future in treating Hair Loss. The morning session closed after Wen Yu Wu talked about “What’s New in Hair Transplantation in China “.

FUE Session

Moderator were Parsa Mohebi and Qing Liu, PANELS were Jean DevRoye, Kapil Dua, Wei Wu, and Robert True. Parsa Mohebi talked about Dynamics of FUE. Robert True spoke on different type of punches. Many punch designs exist, and some designs are superior to others. The ability to use different types is desirable to achieve optimal results for the widest range of patients.

Jean DecRoye presented his donor management techniques. Kapil Dua talked about FUE efficiency in how to get better results and showed his technique on FUE harvesting. Wei Wu spoke on her 10-year clinical experience in eyebrow and eyelash transplant using FUE.

Free Paper Presentation

Moderators were Mohammad Humayun Mohmand and Wei Guan.

Mohmand discussed the Impact and limitation of FUE Harvesting on the Donor Area. John Cole introduced his new implanters and demonstrated how he used the devices for rapid grafts harvesting and placing. Chinmanat Tangjaturonrusamee talked about how to use a Dermoscopy to diagnose different types of hair loss. Thomas Tham gave the different perspectives of Hair Transplant in Asia, with emphasis on South East Asia. Ray Hon Chang spoke on Microscopic Non-shaven Motorized FUE using operating microscope. Ratchathorn Panchaprateep talked about the combining

of fractional 1,927nm thulium fiber laser and platelet-rich plasma in the treatment of male and female androgenic alopecia. The results were impressive.

Wen Yi Wu gave an update on NOACs. He suggested that before hair transplant these blood thinners should be stopped for 3 days if the renal function is normal, or up to 5 days with renal impairments. NOACs can be resumed 1 day after the procedure.

Video Presentation

Moderator was JuFang Zhang. Jean DevRoye shared his tips and tricks for successful FUE harvesting using his trumpet punch. He demonstrated his technique for FUE harvesting and graft insertion. . Mohammad Mohmand showed how to do a strip harvest with minimal transection. Kapil Dua demonstrated the use of his blunt punch for Non shaven FUE. Sanusi Umar described his Intelligent FUE punches that are easy to use in minimizing transection. Wei Guan presented the effect of scalp fibrosis on hair transplantation. Dae Young Kim showed his technique in tapering tips of the transplanted eyelash hairs using an eyebrow trimmer to maintain a more natural looking result. Chinmanat Tangjaturonrusamee showed a video on how different scarring and non scarring alopecia can mimic Androgenetic Alopecia. Tips were given how to make the differentiation.

Management of Hair Loss in Women

Moderators were Carlos Puig and Yong Miao, PANELS were Russell Knudsen, Walter Unger, Jennifer Martinick, and Piero Tesauro.

Carlos Puig discussed on the importance of making the correct diagnosis when treating hair loss. Jennifer Martinick elaborated on how to make physical examination. She commented that consultation time is the most valuable & important time that one should spend with the patients. Ask, look & feel the hair; develop trust; educate the patients, and offer all options. Walter Unger talked about the controversies in Female Transplant. Many women are in fact good candidate for hair transplant. He discussed his technique in making sites in both Ludwig and Norwood type of female pattern baldness.

Russell Knudsen discussed on surgical management of Non Ludwig Female Hair

Loss such as Traumatic Alopecia from burns and injury; Scarring Alopecia from Lichen Planopilaris, Folliculitis Decalvans, Frontal Fibrosing Alopecia; and other Non-scarring Alopecia such as traction alopecia including trichotillomania, congenital triangular alopecia, and radiation alopecia.

Piero Tesauro talked on Non surgical therapeutic interventions In his opinion Female pattern hair loss is not the same as AGA in men, but some form of estrone deficiency

alopecia. He commented on the use of topical estrone+hydrocortisone+ethanol applying 3 times a week can have promising result..

JuFang Zhang mentioned about the historical development of hair transplantation in Mainland China including hair transplant, eyebrows transplant, FUT. The Current trend now is towards FUE. Chih Lu Han compared the punch depth (PD), coring depth (CD) and coring force at different levels of donor zone during ARTAS follicular units harvesting..

Open Microphone Discussion

Moderators were Russell Knudsen and Francisco Jimenez. There were interesting interactive discussion amongst the moderators and audience.

Gala Dinner

It was very well prepared. High technology was used to display audio visual images on the very large LCD screen. D.Pathomvanich welcomed all the audience. Jufang Zhang , Kenichiro Imagawa, Wen Yi Wu gave their speeches while Ken Washenik talked about ISHRS. Medal certificates were awarded to the faculty members, and our guest of honour Walter Unger. Traditional Chinese dinner as served with shows from local medical staffs and professionals. Majority of the faculty were dress in Chinese provided by CAHRS. Most would agree that was a very memorable evening.

Day 2 Saturday, May 12

The Chinese doctors meeting in Chinese started at 8am, followed by our first session at 9:10am. A parallel session was also held at the same time for a different level of audience.

FUT Session: Why FUT should be Available for the Patients?

It was moderated by Damkerng Pathomvanich and JinRan Lin, and the PANELs were Bertram Ng, Carlos Puig, Wen Yi Wu, Walter Unger, Russell Knudsen, and Jerry Wong

Each panel had a 3 minutes presentation expressing their points of views.

There was hot debate during open discussion for the audiences. The majority of surgeons offer only FUE in their practices. In the end, when asked to vote by hand, 80% of the audience believed that FUT will be extinct in a few years time.

Body Hair Transplantation

It was moderated by Kapil Dua and HaiYan Shen.

Jae Hyun Park demonstrated eyebrow transplantation using long hair extracted by his open-window NS-FUE punch. The hair was trimmed to 1-2 cm to maintain the natural curl which gives a better orientation for insertion. PeiHua Liu spoke of Eyelash Transplantation while Kapil Dua discussed his Moustache Transplantation Technique. As hair diameter is less than that of moustache, he prefers the use of 2 hair-FU or pairing of 1 hair-FU with coronal incisions. Umar Sanusi showed a video on body hair transplant using his U-punch and FUE swipe technique.

Bertram Ng delivered the only talk in the meeting regarding technique on local anesthesia: "Pain Less Hair transplant: How I Do It."

Management of the Difficult Cases

Moderators were Wei Wu and Damkerng Pathomvanich, the PANELs were Walter Unger, Carlos Puig, Russell Knudsen, Piero Tesauro, Richard Shiell.

5 Difficult cases were presented for discussion amongst the panels. The first was scarring alopecia from tinea capitis, followed by a severe case of postoperative folliculitis. The third case demonstrated the impressive effect of oral minoxidil on a MPB Class VI patient. The final case was the loss of transplanted hair due to Trichorrhhexis Nodosa.

Combo FUT/FUE

The Moderator were WenYi Wu and LiSha Xue.

Akaki Tsilosanani shared his experience in Combo FUT/FUE. The use of Hyaluronidase for FUT donor wound closure was not recommended due to an increased risk of necrosis. Tension on the other hand could be reduced by extracting 30% of the required number of grafts using FUE above and below, leaving an untouched area just below the FUT closure for future strip procedure.

John Cole had conducted a study on combo of strips and FUE. He reported that after the combo the FUE scars would contract and create tension on the FUT wound, giving rise to a 50% wider scar than FUT alone.

The Recipient Site

Moderators were Walter Unger and YiYan Wang.

Tommy Hwang discussed factors to be considered in the design of the recipient area based on the races. Russell Knudsen commented on the appropriate role of medical micropigmentation in the recipient area. Mario Marzola spoke on the importance of

adjuvant therapy in the long term management of MPB. In his office no surgery will be offered unless the patients agree to take medication when indicated.

Robert True described how the recipient site incision size and density; graft diameter; incision size ratio and depth; can affect graft survival in different races. He showed some tips how to determine the depth of incision by examining the bulbs of the extracted grafts. Piero Tesauro demonstrated how to avoid directions mistake when drawing the hairline.

Graft Storage Solutions, Conditions, and Additives for Hair Transplantation

Moderator was Carlos Puig and LuJun Yang.

Parsa Mohebi's topic was "Solutions used in post-operative care; HRS post-operative solutions, shampoos, and treatments." Carlos Puig presented on behalf of Jennifer Martinick, that there was no difference in survival whether the grafts were stored in chilled or room temperature saline. Robert True also reported that there was no statistically significant difference in graft survival in the use of hypothermasol as storage solution.

Francisco Jimenez commented that there is no scientific evidence that one intra-operative storage solution was better than the others, as long as the out of body time was less than 6 hours. In fact the chilling of grafts might do more harm than good. In case the grafts could not be re-inserted within 8 hours, he recommended keeping them in Hypothermosol.

Carlos Puig favored the use of ATPv in graft holding solutions and as postoperative spray. He reported that with his protocol 25% of patients never experienced hair loss in the recipient site, while 35% showed new growth at 4 months postop.

Robert True discussed the Graft Quality Index for FUE grafts. He categorized the extracted grafts into 4 classes according to the degree of damage. This index would provide an invaluable tool in comparing FUE techniques and devices.

How to Avoid Inadequate Growth

Moderators were Mario Marzola and Mei Li, PANELS were Walter Unger, Richard Shiell, Francisco Jimenez, Tommy Hwang, and Carlos Puig.

Before and after pictures of disappointing growth were shown, and each panel were given 5 minutes to express his opinion.

Potpourri

Moderators were Tommy Hwang and Hang Li.

Kenichiro Imagawa shared his experience in the use of SMP in Asians. He recommended spacing the dots 1mm apart, with a perpendicular depth of 0.5mm

running the machine at 100-150 cycles per second. The use of inorganic ink was preferred as it would not interfere with MRI.

Xing Dong Li spoke on his experience in managing extensive hair loss in Chinese. Russell Knudsen discussed how to put the art into ARTAS. Hong Tao Bo talked on the application of SMP in hair modification. Yu Chong Chen commented that follicles with injured bulb by follicular unit extraction could grow normally after transplantation. Survival however was reduced when the mid-section was transected. He postulated that this might disturb communication between the bulge and the dermal papilla for normal follicular regeneration. He further suggested that mid-section transected grafts should not be used as their survival rate was shown to be only 13.3% to 53.3%...

Robert True elaborated on the post-operative care after FUT and FUE transplantation, with special comment on treatment of MRSA.

Cicatricial Alopecia

Moderators were Francisco Jimenez and HanXiao Cheng.

Francisco Jimenez reported that the transplant of hair follicles into non-healing body wounds would promote wound healing. The stem cell reserve in the bulge might have a role in encouraging epithelization. Hair bearing skin graft reduced the wound area by 75.15%, while non-hair bearing graft reduced by only 33.07%.

Yu Yan Wang spoke on Tissue Expansion combined with Follicular Units Transplantation in treating Cicatricial Alopecia. Kristine Bunagan shared her management approach and therapy for LPP/FFA. She recommended not to biopsy area without active hair loss. Ali Abbasi compared HRS results in inflammatory versus traumatic cicatricial alopecia. Inflammatory alopecia usually had disappointing result after HRS. In case of doubt a skin biopsy should be performed and proper consent obtained before surgery.

Qing Liu discussed the combined use of Self-adipose tissue filling with hair transplantation to repair cicatricial hair defect.

The meeting lecture session was closed after an open discussion and poster presentation review. Among 30 posters, Dr. Tsung-Hua Tsai from Taiwan poster title "Androgenic alopecia treated with 1064 nm picosecond laser" and Dr. Akiko Kaneko from Japan poster title "A new classification of Early Female Pattern Hair Loss" were selected by Walter Unger, Richard Sheill and Francisco Jimenez as the most interesting abstracts.

Live Viewing

Moderators were Ken Washenik, Russell Knudsen, and WenYu Wu.

There were 10 interesting Live Viewing patients, two from Thailand and the rest from China.

Due to the large number of attendants, it would be impossible for each audience to examine and view every case. Instead the before and after pictures of each patient were displayed on a big screen for the moderators and surgeons to make comments.

Day 3 May 13,2018

The Live Surgery Workshops were held at First BCC Plastic Surgery Hospital.

The auditorium was crowded with all the attendances. There were 4 cases instead of 5 as planned.

Room 1 was Pierro Tesauro, Jinran Lin and Yanshuang Bai. They were in charge of a male patient with AGA class III planning for FUT. Dr. Tesauro demonstrated his technique how to harvest the strip with his modified open technique. He carefully dissected the wound edges with minimal graft transection and bleeding. He demonstrated the use of Haber spreaders, which seemed to have more bleeding. The times for using the two techniques were the same as he had to spend more time in haemostasis for the spreaders.

He went on to demo his modified trichophytic techniques by leaving behind more hairs in between the wound edges before approximating with staples. In the recipient he

The first marked the incisions with Methylene Blue stamps. Slits were then made with Sapphire blades before the grafts were inserted.

Room 2 was Dr. Kapil Dua and his male patient with scarring alopecia in both armpits from burn. He extracted the grafts using FUE with his blunt punch. Dr. Imagawa made slits on the right armpit, while Dr. Wei Guan made slits on the left. The grafts were placed with forceps. The lack of elasticity with scarring added to difficulty in keeping the grafts in place.

Room 3 was Dr Fei Zhu who performed eyebrows transplantation using stick and place technique with needle. In order to match the hair calbres, grafts were extracted behind the ears by .FUE

Room 4 was Dr. Pei Hua Liu performing eyelash transplant. She carefully removed long hair from the nape and sides of neck with sharp punch FUE. The grafts were then placed to the existing eyelashes in two rows. The final result was very impressive.

All the surgery went well except some lack of communication between the audience and the operating teams. Overall the meeting was rated satisfactory by the majority of faculty and attendances.