

Learning from the Past, Gleaning into Future

Hair transplantation (HT) has made significant progress in its checkered history, and has now been established as a reliable treatment modality, which can provide consistent and pleasing cosmetic results. The concept of follicular unit by Headington provided the scientific logic for the description of follicular unit transplantation (FUT) by Rassman and Bernstein, and later of follicular unit excision (FUE) by Bob Woods and Rassman. FUT, which consisted of single-strip donor harvesting with subsequent microscopic dissection of the strip into follicular units, followed by implantation of these naturally occurring units into recipient sites, made it possible to obtain such natural cosmetic results. With precise mathematical calculations megasessions were possible, and large areas could be covered in one session. Hence, this method became the gold standard method. The more recent introduction of FUE was a watershed, as it leads to simplification of technique, minimalization of surgery, and enhancement of the available donor area. Its amenability to introduce a robotic device leads to possibilities, which were hitherto not possible. Introduction of implanters, biological holding solutions, specialized punches, motorized devices, robotic devices, and so on, have further led to increasing acceptability and popularity of HT, with over 635,189 HTs being performed around the world in 1 year (International Society of Hair Restoration Surgery: 2017 Practice Census Results, August 2017).

This symposium deals with different aspects of HT and discusses the progress made. The first article on “Logic of hair transplantation” by Dr. Aniketh Venkataram and Dr. Venkataram Mysore describes the different principles and scientific logic behind different aspects of HT, such as mathematics of HT, concept of recipient influence and body HT, and the concept of optimizing donor area. It is fascinating that a true histopathologic concept plays such an important role in the development of surgical techniques. After all, HT is a number of small repetitive steps performed in harmony and sequence to yield a final great result.

FUT, discussed by Dr. Aman Dua and Dr. Kapil Dua, is at crossroads as a technique. A challenge to the beginner and a delight to the surgical master, this technique, for long, has been the gold standard. Single-strip dissection allows for precise mathematical calculation of the number of obtainable grafts. Stereomicroscopic dissection allows precise dissection and production of a large number of follicular units, in the hands of a team of skilled dissectors. Proper donor closure in two layers with trichophytic closure results in very thin pencil line scars. However, the

technique has some deficiencies, both in surgical and in management aspects, some real and some exaggerated. Donor strip surgery, which needs proper surgical expertise and requirement of an operation theater, is daunting to many doctors. The stereomicroscopic and video-microscopic dissections and the requirement of a large team of assistants needed for the megasessions are difficult to develop. The variable healing properties of skin coupled with aggressive donor harvesting to meet the demand for larger and larger sessions by patients, lead to wide unacceptable donor scars. It is no longer enough to produce aesthetic results in the bald area, the results have to be aesthetic over the donor area too. Although trichophytic closure goes some way in producing thin pencil line scars, there are far too many wide scars produced by beginners and aggressive surgeons. Changing attitudes, demand for less invasive surgery—a trend seen in all cosmetic fields—led to the development and popularity of FUE. However, the technique remains relevant and Dr. Dua discusses the technique of overcoming the challenges and using it appropriately for the needy patient.

Follicular unit excision (till recently called follicular unit extraction) has decreased this somewhat exaggerated fear for scars and thereby has removed the fear of surgery and made the surgery less invasive and more comfortable with its dramatic healing of extraction sites in a single day. Dr. Anil Garg discusses the different aspects of FUE: the scientific logic, the pivotal role of arrector muscle, technique of extraction, and the safety of large sessions cogently. The technique, which was regarded as slow, cumbersome, and inefficient because of high transection of hair, has become quicker, easier, and more efficient. The technique has also resulted in the enhancement of donor area into beard and body, making it possible for surgeons to harvest several thousand grafts and this remains the single biggest advantage of this technique. Mechanics of the process of FUE, development of specialized punches such as serrated and trumpet punches with precise depth control of penetration, and motorized devices are all succinctly explained.

The techniques of recipient area implantation are explained by Dr. Manjot Marwah and Dr. Venkataram Mysore. The techniques for large sessions and comparison of different techniques, such as premade slits and slit and place technique, are explained. The use of implanters has recently seen resurgence as they cause minimal handling of the somewhat fragile FUE grafts. Time management to minimize out of body, use of holding solutions, and ergonomics of HT are also dealt with. Tips for a proper

hairline design, avoiding popping, and postoperative care are also explained.

A minimal surgery is still a surgery and complications can happen in HT. Dr. Narendra Patwardhan and Dr. Amit Kerure dealt with complications in detail, both of FUT and FUE, in donor as well as recipient area. Tips are also provided on how to avoid and prevent complications and also to heal with them when they happen. The need for reasonable and realistic expectations is stressed on. It is important to adopt and follow protocols to ensure a safe surgery.

Alas, in the Indian scenario, as perhaps elsewhere, hair transplant has undergone a vicious cycle of growth and diminution. After the advent of FUE, most of the surgeons made it their favorite and became exclusively FUE surgeons. This resulted because of the lucrative financial aspect of FUE, which requires minimal instrumentation, space, and staff. Doctors of different specialties have chosen this surgery as a solo surgery for practice, and strip surgery has taken a backseat. This led to a highly competitive market, with false advertising and prices dropping to a bare minimum. With such low prices involved for a surgery that demands 6–8 h of surgeon's time, most of the surgical steps started being handed over to the technicians. Worse, the technicians themselves have started performing surgeries. This was the starting point of the downfall in the field of HT. With the competitive prices, the second change that came along was the race for mega- and gigasessions. It has become a matter of pride for dermatosurgeons to extract 4000–5000 grafts in 1 day. This has led to a major problem of overextraction and graft depletion. The science behind hair restoration has gone for a toss in the current scenario. New treatments are being branded as a panacea, often with little evidence. These controversies such as platelet-rich plasma, roles of FUT versus FUE, safe donor, and issues of quackery are all discussed in an extensive article by Kumaresan and Venkataram Mysore.

There is therefore a need to restore the science back into HT and adopt ethical practice at each step. This symposium, we hope, is of use to both dermatosurgeons who wish to start HT and those who wish to advance their skills. Every patient requires and deserves a unique approach. Every surgeon needs to learn all techniques and ethically choose the right technique for each patient. This symposium emphasizes this point.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Venkataram Mysore, Manjot K. Marwah¹

The Venkat Center for Skin and Plastic Surgery, Bengaluru, Karnataka. ¹National Hair Clinic, Hamirpur, Himachal Pradesh, India

Address for correspondence: Dr. Manjot K. Marwah, National Hair Clinic, Devpal Chowk, Hamirpur 177001, Himachal Pradesh, India.

E-mail: drmanjotmarwah@hotmail.com

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

Access this article online	
Quick Response Code:	Website: www.jcasonline.com
	DOI: 10.4103/JCAS.JCAS_175_18

How to cite this article: Mysore V, Marwah MK. Learning from the past, gleaning into future. *J Cutan Aesthet Surg* 2018;11:165-6.