



## **Venkat Charmalaya** **Centre For Advance Dermatology**

**Dr.Venkataram Mysore MBBS.DVD.DNB. MD.DipRCPath (Lond) FRCP (Glasgow)**

**There is a big debate on the advantages and disadvantages of the two methods –FUT and FUE. In particular, there is a huge publicity over several terms, scarless HT, DHT, DHI etc. This article discusses this issue based on current evidence.**

**Follicular unit Hair transplantation (FUT) with Trichophytic Closure:** Over years, instruments and techniques have been developed that allow us to achieve truly natural results by transplanting small grafts containing 1-2-3 hairs, very close together. It has been found that hair grows from the scalp in groups of one, two, and three hair follicles called follicular units. Transplantation of these units results in denser and more natural results. **In FUT, a strip of skin with hairs is removed, dissected under microscope to separate follicular units and then transplanted. The removed strip area is sutured by a special method called trichophytic closure which heals with an imperceptible thin line which is hidden under the hairs.** Recently technique has been developed to place grafts with in suture to ensure that hairs grow through donor scar. The other major advance in this field is the use of microscope to dissect hairs and avoid transaction of hairs. Improvements in technique have enabled us to transplant even upwards of 3000 units (in patients with good donor hair) in one session. While the average density given in an usual session is up to 35 per sq cm, higher density of even up to 50 or 60 can also be given.

### **Its advantages are**

- a) it is quicker**
- b) It is cheaper (half the cost off FUE)**
- c) It is very accurate as microscope is used for separation of hairs**
- d) Large numbers can be grafted in one session- even up to 3200**

### **Its disadvantages are**

- a) It needs a stitch in back of head**
- b) It heals with a scar**
- c) It needs 10 days to heal**
- d) Cause a little more pain than FUE**

**2. Sutureless transplantation or FUE:** More recently, a new method called **FUE or follicular unit extraction** has been introduced. This has also been called DHT/DHI/ADHI by different companies, with minor modifications. In FUE, small holes of size 0.8-1 mm are made for each unit of hairs; each unit is pulled out from the donor area individually, with tiny 0.8mm, -1mm instrument called punch and then transplanted in to bald area, these tiny holes then heal with minute imperceptible scars, without stitching. For this reason, FUE is also called suture less transplantation. It should be understood that there is no difference in the way these hairs are transplanted in to recipient area. The only difference is in the way they are taken out from the donor area.

**Its advantages are:**

- a) **It is a less invasive procedure.**
- b) **It is less painful- in fact is very minimal**
- c) **Healing time is faster- within two days**
- b) **There is no suture**
- c) **There is not suture scar and so patient can at any time shave his head.**

**Because of these reasons, it is gaining in popularity. Nearly 25% of HT are performed by this method.**

**It has some disadvantages too:**

- a) It is less perfect than FUT as hairs are pulled out blindly- **there is no microscope.** 5-10% of hair may be lost.
- b) Donor scalp needs to be trimmed very short, almost shaven-1 mm. This is not acceptable to many
- c) It is more expensive; as much as two times the cost of FUT.
- d) There is a limitation to the total number of grafts transplanted in one session: maximum is usually around 2000. Beyond this , it is difficult in one session. If done, it leads to donor depletion and makes future HT more difficult

**Which method should I undergo? FUE or FUT? Our Philosophy.**

**Both methods have their advantages and disadvantages, and both are useful. What is needed is to have a balanced view, keep a proper perspective, and use them for ones best advantage. See below table for comparison of the two methods. Ultimately, what is important is to determine what is needed for each patient.**

**Comparison of FUT and FUE :Both have same technique over recipient area. ONLY DONOR IS DIFFERENT**

FUT	FUE
Strip excision of donor skin with suturing (Stiching)	Extraction of individual units one by one through small punch holes; each alternate hair unit is removed. No Suturing.
Heals with a single linear scar which is 1-2 mms wide , hidden under hairs	Heals with multiple tiny dot like scars in between hairs
Healing over 10 days	Healing over 2 days
Donor area not shaved; suture completely hidden.	Donor area completely shaved; to remove 2000 grafts, at least 20*4 sq cm are shaved
Quicker;4 hours for 2000 grafts	Slower 7 hours for 2000 grafts
More precise because of microscopic dissection	Less precise as units are manually pulled blindly
Minimal damage to hair roots	Damage to hair roots possible in 5-10%
Operation site over donor hidden completely even on the day of surgery	Operation site shaven and hence visible
Large sessions, up to 3000 grafts possible	Large sessions difficult-so suitable for small and medium bald areas
Less expensive –	2 times more expensive because of the prolonged
70% of world’s transplants are done by this method	30% of transplants by this method- suitable for small areas, people who are afraid of stich and people who want to keep short hair

NOTE: FUE IS NOT POSSIBLE IN ALL- SOME PEOPLE HAVE VERY TIGHTLY PACKED HAIRS AND THESE GRAFTS DON'T COME OUT EASILY BY FUE, AND MAY BREAK-IN SUCH PATIENTS, A TEST CALLED FOX TEST IS DONE; BY EXTRACTING 50-100 UNITS TO ASSESS. IF THE TEST YEILDS POSITIVE RESULTS, ONLY THEN FUE IS PERFORMED.

**Myths:a) Pl. do not believe advertisements for scarless HT- once there is some damage to skin , there is always a scar, however small- afteral, even a pimple on your face leaves with a scar.**

**b) Pl. understand the difference between Follicle and follicular unit. Follicle means one hair; follicular unit means a group of hairs of 1-4. The cost should be charged per unit and not per follicle**

**c) In either method, the original hair does not grow back at donor site. It will only grow on grafted site**

**Our recommendation:**

**The decision is best answered by the patient in finding answers to below questions:**

- a) Do you have the budget for FUE? If no, Go for FUT. If yes, go for FUE as you desire**
- b) Are you bothered by the 8% transection rate( damage to hairs) in FUE? If yes, go for FUT**
- c) Do you want microscope to be used to avoid damage to hairs? If yes, If yes, Go for FUT**
- d) Are you bothered about the linear donor scar? If yes, Go for FUE**
- e) Do you want to avoid stitch? If yes, Go for FUE**
- f) Do you want to have large session of over 2500 grafts? If yes , Go for FUT**

**Which ever method you choose, do not agonize over it- do not get too confused over it- after all, what is more important is how you look over grafted area! And you can not have the cake and eat it also- you cant have the best of both. So choose one method and trust your doctor to do the best**

**Beware: There has been a tendency on the part of some commercially run clinics to overstate and overemphasize FUE. In many cases it is entirely for commercial reasons- after all FUE costs more than FUT to the patient and the clinic benefits more if patient does FUE!! We disapprove this tendency strongly!! Like wise there is also a tendency to scare patients from medical treatments so that patients will be pushed towards HT. This is also unethical as proper medical treatment helps in decreasing number of grafts and delay future transplants.**

**Balanced approach is needed in all cases- use all modalities for the best benefit of the patient.**