

Estimate Number of Grafts

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If the patient has lost his hair completely at the time of surgery, we usually suggest two surgeries at 25% density each session. If the bald area is 100cm², to achieve 25% density we will need to harvest 25cm² of donor area in each session.

Calculate the Number of Grafts

Now we have harvested 25cm² of donor strip. Depending on the size of the grafts, we can determine the number of grafts without difficulty.

For example, each follicular unit is about 1 × 1mm², 1cm² will produce about 100 grafts; therefore, 25cm² will give 2,500 grafts.



Figure 3. Apply the transparent sheet (plastic food wrap) over the scalp. Trace the coverage area on transparent sheet.

Advantages

◉ *Same coverage area with pre-set density = same number of grafts.* If we ask ten hair transplant surgeons to estimate the number of grafts needed on a particular patient, I am very positive that we will get ten different answers.

With this system, every surgeon, consultant, and even the patient can reach the same number of grafts as long as same coverage area, pre-set density, and same size of graft.

◉ *Patient will not have unrealistic expectations.* Today, a natural looking transplant is not difficult to achieve with the micro and follicular technology. The **density** is the problem that we are facing. When we tell the patient that he needs either 500 grafts or 1,000 grafts, it doesn't make any sense to him because he doesn't know what 500 grafts or 1,000 grafts can do for him. He may expect a full head of hair after one session.

With our method, we tell the patient that we will deliver 25%,

30%, or 35% of his original donor site density on the receipt area. He will have a better idea of the thickness of his new hair and will not expect a full head of hair after only one session of surgery.

The patient may ask if he needs four surgeries (assuming to achieve 100% density) to achieve the normal appearance. At this time we can show him our former patients' pictures that have 25% and 50% density transplanted. This will give patients a much better understanding of the outcome.

◉ *No over or under harvesting.* With this method, we decide the size of donor area first then determine the type and number of grafts. This way, the error of over harvesting and under harvesting is minimized.



Figure 4. Transparent sheet with the coverage area

◉ *Same coverage area for consultation and surgery day.* Because we have the photocopy of the transparent sheet and the digital photo of patient's scalp on file, we do not need to go through the process of measuring on surgery day. We just need to make sure the coverage area is the same before we start the surgery. And we have an idea of what kind of hairline we had mutual agreement on at the consultation.

◉ *Give surgeon the ability to estimate the maximum coverage area.* We all agree that the maximum usage of permanent donor hair is about 50%, and if 50% donor site density is adequate, then:

—If permanent area /coverage > 1, the patient **MAY** have enough hair to cover the whole bald area.

—If permanent area/coverage < 1, the patient **ABSOLUTELY WOULD NOT** have enough donor hair to cover the whole area.

◉ *No actual density measurement.* To measure the actual hair density is almost impossible. The hair density is different over the whole scalp; for instance, occipital area has higher density than temple area.

The method mentioned above uses a "relative comparison." We do not tell our patients how many grafts are in 1cm² of donor strip; we only tell them that we deliver 25% of their own density. For example, to cover 100cm² of baldness, we harvest a 25cm² donor strip. After cutting it into smaller grafts, we implant them back to the scalp completely. This gives a 25% density. We do not have to count how many hairs to reach 25% density.

Our goal is a natural looking appearance. To achieve it, relative density is more important than actual density.

◉ *Find out the maximal ability of your surgery team.* In the long run, you will find out the maximal pre-set density that your team is capable to deliver among different races and with different sizes of grafts. This will also prevent over harvesting.

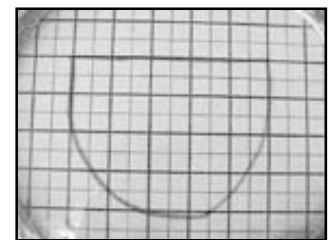


Figure 5. Place the transparent sheet (plastic food wrap) over the specially designed graphic paper to count the number of small squares.

The number of grafts enables us to predict the surgery time and effort but does not predict the actual outcome. Different facilities use different sizes of grafts; therefore, the total number of hairs can be different and even more than 100%. Unfortunately, when patients shop around for the price, they always believe the same number of grafts will have the same value and, supposedly, same outcome. To predict the outcome among different clinics, I personally consider that the ratio of donor strip size to coverage area (the density) is a much better indicator. ✧