



(51) International Patent Classification:

A61B 17/00 (2006.01)

(21) International Application Number:

PCT/TR2019/000070

(22) International Filing Date:

09 October 2019 (09.10.2019)

(25) Filing Language:

Turkish

(26) Publication Language:

English

(30) Priority Data:

2018/16935 09 November 2018 (09.11.2018) TR

(72) Inventor; and

(71) Applicant: **KAHRAMAN, Yilmaz** [TR/TR]; Halide Edip Adivar Mah. Darulaceze Cad. Elmas Plaza No:19/7, Şişli/İstanbul (TR).

(74) Agent: **YEŞİLYURT, Murat**; Optimum Patent Ofisi Danışmanlık Ltd. Şti., 19 Mayıs Mahallesi Halaskargazi Caddesi Yapi Apartmanı No:220 Kat:9 Daire:16, Şişli/İstanbul (TR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,

KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report (Rule 48.2(g))

(54) Title: HAIR TRANSPLANTATION TECHNIQUE THAT REDUCES THE HAIR GROWTH PROCESS AND REACHES A HIGHER NUMBER OF HAIR FOLLICLE

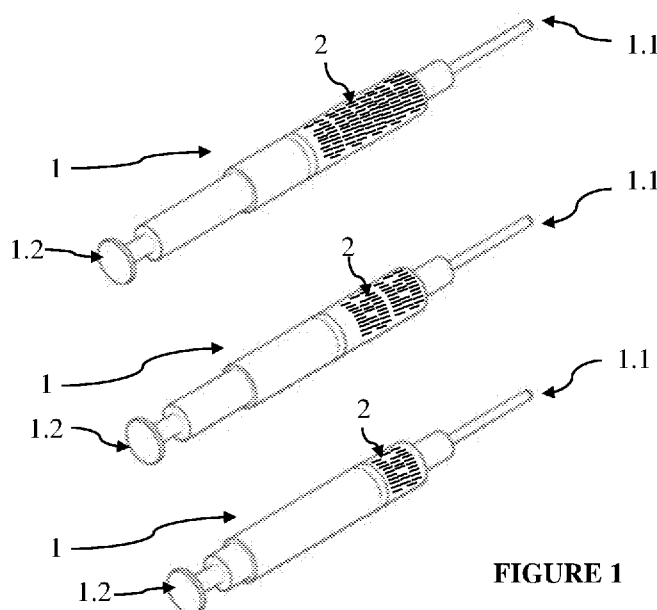


FIGURE 1

(57) Abstract: The present invention is a hair transplantation technique that reduces the hair growth process, reaches a higher number of hair follicles in one session and increases hair growth success despite genetic causes.



HAIR TRANSPLANTATION TECHNIQUE THAT REDUCES THE HAIR GROWTH PROCESS AND REACHES A HIGHER NUMBER OF HAIR FOLLICLE

5

Technical field related to the invention

The present invention is a hair transplantation technique that reduces the hair growth process, reaches a higher number of hair follicles in one session and increases hair growth success despite genetic causes.

10

Prior art

Patent no. JPS5465659 (A) belongs to 1979 and refers to a method covering a total of 6 stages related to hair transplantation. The hair strands are held together with a resin plate to be defined in a rainbow-type bulging form. This part is in an inlet space and has a section with wing-shaped opening after the inlet space which facilitates holding. The document is mainly concerned with the most primitive technique of hair transplantation.

15

Patent no. JPS5921610 (A) belongs to 1984 and relates to a nutritious formula to aid hair growth. It relates to hair tonic which consist an oxidizing component containing an active ingredient which reduces hair loss by eliminating the reduced 17β HSD enzyme activity present in the sebaceous glands. The hair tonic component according to claim 1 is selected from the oxidizing agent, stabilized chlorine dioxide, sodium bromate, sodium perborate, potassium bromate. Optionally, the stabilized chlorine dioxide content was determined to be 100 or 500 ppm. The content of sodium bromate in the hair tonic component is stated to range from 50,000 to 120,000 ppm and the potassium bromate content is 5% to 12%. In addition, it was reported that the content of sodium perborate was 59%. The invention relates to a tonic that promotes hair growth and prevents hair loss, and this is a well-known component and its effect on the growth of the hair is seen over a long period of time.

20

25

The last known application for hair transplantation is the FUE method. FUE (Follicular Unit Extraction) and FT (Follicular Transfer), known techniques among hair transplantation methods, are the methods used for obtaining hair follicles from the donor area and repositioning them in the alopecia region.

30

In this process, grafts are removed from the hair strands behind the head. These grafts are hair follicles consisting hairs between 1 to 4. These grafts are then transferred to the scraped scalp. During the FUE method, the hair follicles are taken from the back of the head with a single hollow needle or pliers (drills), and these roots are placed in areas of need or in several parts of the head. This is done by means of a hollow needle or a small cup.

The transplanted hair is shed after approximately 3-6 weeks and then they grow again after 3-4 months. The actual results take 12-18 months. This applies to the FUE method.

FUE (Follicular Unite Extraction) method of hair transplantation basically consists 3 stages. In the first stage, the area where the hair is to be sown is defined when the hair is long. After the area is determined, the hair is shortened to the required length. The reason for this shortening is to ensure that the hair is removed by punches. The punches are medical devices that have spikes of different sizes similar to penpoints that allow the hair follicles to be loosened and collected by micro-pen-set.

Then, the region where the grafts will be taken is determined and local anesthesia is started. Then, the punch is selected in accordance with the patient's graft density and the direction of the graft, and the collection process starts. Punch selection is an important parameter in order to take the grafts without damage. The grafts taken are kept in special solutions by adjusting the appropriate temperature of the medium.

The main structure that is taken from behind the head during hair transplantation and planted in hair-loss areas is grafts. There are hair follicles and some skin in the graft and it varies according to the number of hair follicles and the amount of skin it contains. Hair follicles in the graft can be found as single, double, triple or quadruple. Hair follicles are the area of the living cells that produce and grow the hair.

In hair transplantation, grafts are exclusively taken from the person itself, grafts taken from someone else cannot live and hairs will not come out.

In the second stage, the area where the hair will be transplanted is defined after grafts are taken, then the line is determined.

Local anesthesia is applied to the area to be planted and the grooving is started. The direction and density of the hair to be planted is determined by the channels in this stage. Serum is injected into the areas selected by the patient, which is specially prepared for grooving; and with this step the grooving process starts. The shafts in which the hair follicles will be placed during the sowing process are called channels and these shafts are formed with fine incisions. This process is created with the help of special tools called lateral slit/slit. Different tools are used in these opening processes because the hair follicles used in the front and the top areas are not the same. When opening the channel, any other non-lost hair, if any, is taken as reference, otherwise the channel direction is applied in accordance with the patient's request and anatomical structure of the open space.

The choice of slit should be done in a way that is appropriate to the grafts. Slit which is larger than required leads to cavities at the depth of the hair, and slits smaller than required leads to the harming of grafts at the sowing stage.

The density of the canals should be such that it will not cause circulatory disorder in the sowing area after sowing. If this density is not adjusted correctly, the number of lost hairs after sowing may increase.

In the last stage, the grafts taken are placed one-by-one in the channels which are opened with precision without damaging them with sowing forceps, and the sowing process is completed. The hair transplanted with hair transplantation lasts permanently for life. Hair to be used in the process is usually taken from the back of the head. The hair growing in this area are not lost, even in the case of serious hair loss. In case of placing hair on the head in accordance with the FUE method hair transplantation, the hair in the hair line and in the temples will retain their genetic characteristics. Thanks to hair transplantation, hair regrowth is ensured in hairless areas.

Technical problems which the invention aims to solve

In the classical FUE technique, the hair follicles are taken one-by-one from the back of the head with the help of a hollow needle or pliers (drill); the follicles taken are placed on the requiring areas or on several parts of the head. This is done by means of a hollow needle or a small cup. The transplantation is done, and the transplanted hair is shattered after

approximately 3-6 weeks and then the hair grows again after 3-4 months. The main results are obtained in a period of 12-18 months.

In the hair transplantation in classical FUE technique, during the hair transplantation process in the upper part of the head; the hair within the hair line and temples save their genetical properties, and hair regrowth is ensured in hairless areas thanks to hair transplantation. With this technique, it is possible to transplant more than 3000 grafts per day. In order to perform a sufficient number of hair transplants, treatment with more than one session is required.

As mentioned above, the shafts in which the hair follicles will be placed during the sowing process are called channels and these shafts are formed with fine incisions. Grooving is the most important process of hair transplantation; while the channel depth determination and injection of grafts into opened channels are the determinants of permanence of hair transplantation. Hair transplantation is made to the second layer of the three layers under the skin, but determining the correct depth is the most important factor for the permanence of the hair transplanted. The layers under the skin are as follows; epidermis, dermis and subcutaneous. The hair transplantation is made to mentioned second layer, the Dermis. However, due to the anatomical structure of the head, it is not possible to open the canals without damaging the existing hair in the areas which has not got bald but where the hair get thinner. Application of grooving by harming the hair follicles owned by the donor does not yield healthy results; rather it can also lead the opposite effects.

Failure to open grooves prevents hair transplantation and the operation in the mentioned areas.

The invention which is a hair transplantation technique that reduces the hair growth process, reaches a higher number of hair follicles in one session and increases hair growth success despite genetic causes, completely overcomes the above problems and provides an earlier achievement of final result in the hair transplantation process.

The ASI method of the invention, called Anti shock loss implantation, eliminates the grooving process due to the fact that it is not possible to open channels without damaging the existing hair in areas where the hair is still dense, especially in the areas which are not

becoming bald, but where the hair get thinner, and it allows the injection of the solution of processed hair follicles underneath the scalp to the required depth.

The invention consists of a new technique called FUE-CT (Circulation Treatment) to reduce the process of hair growth and reach a higher number of hair follicles in one session and increase hair success despite genetic causes.

In the FUE-CT procedure of the invention, the final result takes about 6-9 months, and it significantly reduces the time to achieve results in hair transplantation. In this technique, the duration of hair growth is reduced, and it reaches to the higher number of hair follicles in a single session and increases hair success despite genetic reasons.

This method, unlike the FUE method applied today, contains two separate methods. These are called CTS (circulation treatment stimulator) and ASI (anti shock loss implantation).

During the treatment and after treatment, various protocols are applied according to the patient's indication (patient's gender, age, genetic structure, medical condition), i.e. there is no standard application as in the classical FUE application.

Application of ASI (anti shock loss implantation) treatment: Since it is not possible to open channels without damaging the existing hair in the areas where the hair is still dense and especially in the areas where the scalp is not bald but the hair get thinner, the processed hair follicles solution is prepared by a special method and injected to the required depth in the dermis layer under the scalp. Injection of hair follicles is done without channel opening and by injecting through canal points opened in small numbers among spaces among hairs and without leading to hair damage.

CTS (circulation treatment stimulator) treatment and application: It is applied to stimulate the blood circulation in the scalp, to allow the hair follicles to take the necessary minerals and to protect against DHT (dihydrotestosterone). The CTS treatment also minimizes temporary hair loss in the donor area and in the hair-transplanted area with the shock loss.

The stimulation of the blood circulation under the scalp and the support of the hair follicles by the special proportions of vitamin and mineral and plant extracts, the hair follicles grow faster and have a healthy and thick hair structure. With the help of CTS support, the generally weakened hair is also affected positively and the overall hair structure becomes stronger.

5

Multi-grafts (multiple grafts instead of single grafts) are used in the FUE CT technique. With experience gained so far, 70% or more multi-grafts (3 or more hair follicles) are used in people having healthy donor areas, resulting in a denser result of 2-fold or higher. While taking multiple grafts, punches in acceptable thickness are used to prevent the development of problem in the recovery of the donor area. Instead of obtaining 8000 hair follicles with 6000 grafts, 8000-9000 hair follicles can be planted with 3000 grafts. When there is smaller number of grafts against the higher number of hair follicles, the damage on the neck decreases and the recovery accelerates. Thanks to the stimulants used and the FUE CT biological minerals given after the operation, the losses in the planted hair are minimized and the hair grows more thicker and healthier. In this way, a single session yields a 2-3 times better result.

15

In this way, instead of two sessions, guaranteed and desired results can be achieved in single session.

The standard operating protocol during and after operation in FUE CT technique is as follows:

20

- Before the grafts are taken from the neck, if the hair in the area where the graft is to be taken is weak, it is supported by CTS application to minimize the risk of shock loss,

25

- The channels are opened to the safe depth where the blood circulation in the scalp will be the strongest, and the multi grafts are placed here. This depth can vary from person to person and the channel-opening expert determines this depth by his/her experience. If the rate of bleeding is very slow here, the blood circulation is promoted by CTS stimulants.

30

- After 7 days from the operation, FUE CT mineral and vitamin pills are started and used for 9-12 months until the result is achieved. These tablets will supplement the lack of vitamins and minerals necessary for the formation of hair in the body. Some substances will also promote blood circulation in the scalp. CTS treatment has a great effect on improving the weak appearance of the existing hair.

- In the first 18 days, the scabs are washed with special shampoos and lotions, and the skin is completely cleaned. On the 18th day shampoo should be changed to FUE CT hair shampoo and used for 9-12 months until the result is achieved. The active ingredients in this shampoo will support the circulation in the scalp and support the healthy hair structure.

5

- The CTS (Circulation Therapy Stimulator) treatment, which provides the biggest support in hair growth, must be applied once within 4-6 weeks without entering interval between 6-10 weeks, which we say to be the hair follicle adaptation period. The second CTS session should be applied between 4-6 months when the hair starts to appear. With CTS, the blood

10 circulation in the scalp is accelerated and the necessary vitamins and stimulants are injected under the skin so that the process is passed without loss and rapidly.

It is necessary to apply this method especially in diabetic patients who has a difficult recovery period.

15

If hair growth lags and the hair structure is thin after 6th month despite all these applications, the CTS treatment can be applied up to 12 months at 6 weeks intervals. Since the CTS formula is completely biological, it has no side effects and can be applied in every 4 weeks.

20

- In FUE-CT procedures, the results are taken within 6 to 9 months. The results of the hair on the top can sometimes be achieved in 12 months. It is observed that the thickness of the implanted hair is generally thicker than the existing hair and it grows healthier. The result of hair growth in the FUE technique is observed between 12-18 months and it generally remains structurally thinner when compared to FUE CT results.

25

Application of FUE-CT technique:

Each hair transplantation is performed according to a strict protocol and the protocols to be applied may vary in each operation.

30

Before treatment, the operator decides which type of groover/punch/knife to use depending on the thickness / area of the skin (head / forehead). (slit, cannula, injector, etc. or method of injecting hair follicles into the hairy area, application of ASI technique, CTS (Circulation Treatment Stimulator) substances applied on the skin or under the skin.

Chemical products such as finerastid (Propecia) / minoxidil are not used during the process. All of the products we use are natural foods that strengthen the hair follicles against the DHT hormone's damage to the hair follicles (dihydrotestosterone) used for hair growth.

- 5 During the local anesthesia performed at the beginning of surgery, to have the maximum pain relief effect and the least impact on the scalp blood circulation, diluted and tailored amount of adrenaline / lidocaine is applied to various areas.

ASI (ANTI SHOCKLOSS IMPLANTATION)

- 10 It is very risky to open channel between the hairs when the hair is not lost but thin. Since there is no hair loss in these areas, there is no distance between the follicles; thus, hair follicles around are damaged when channels are opened with high number of sharp edges. The application of the ASI method prevents the hair loss arising out of the possibility of damaging the hair follicles while opening the channel. In the ASI method, instead of opening the skin
15 channels, the solution of the processed hair follicle extract is applied to the areas with hair but where the hair is thin.

- In some cases, a small number of channels are opened to the problem area and grafts are planted in those areas and hair follicle solution is injected through those points by the ASI
20 technique. In this way, a high number of hair follicles are placed at the required depth without damaging the surrounding hair.

- CTS substances are applied to the plantation areas to increase the shock loss resistance and to provide better treatment.

25

APPLICATION OF THE ASI TECHNIQUE AND PREPARATION OF HAIR FOLLICLE SOLUTION

- After the hair follicles are removed, strong, undamaged and healthy multi-grafts are separated for transplantation. Weak and damaged grafts are not planted in FUE CT sowing technique
30 because there is high expectation of density in the FUE CT technique and hair growth is guaranteed.

These weak grafts are reproduced with healthy grafts and treated as follows: the dermal papillae under the hair follicles are isolated and mixed with selected hair follicles in special

conditions to homogenize and form a solution. This solution contains various vitamins, minerals and CTS stimulants.

Dermal papillary have a large effect on their environment, from their ability to move the cells above, to transform into a new hair follicle.

This solution (melted papillae and processed hair follicles) is injected into a safe depth of the dermis layer through the spots which are hairy but sparse due to getting thinner and ensure its re-growth in here. The preservative body located around the hair follicle (papillae) contains substances that accelerate the healing of processed hair follicles.

To better understand the hair growth process, the anatomy of the hair follicle and the reason why the aforementioned papillae are used in the ASI hair follicle solution in the FUE CT technique are explained below.

For a rational evaluation of hair diseases, follicular anatomy should be well known.

The hair structure can be easily examined through the cut hair follicle shafts, all hairs which are ruptured by slightly pulling or strongly pulling from the skull, or scalp biopsies to be fractioned perpendicularly or transversely.

The anatomical features will vary depending on whether the hair concerned is in anagen, catagen or telegonous stage.

The follicle size will also vary similarly from the thin vellus hair to the long, thick terminal hair.

A follicle can be divided into different regions: root, above-root area (supra-bulbar area), isthmus and infundibulum.

The character of the actively growing (anagen) hair is a hair matrix surrounding the dermal papilla; outer and inner root covers are present and well developed.

A catagenic hair can be detected with a significantly thickened glassy and fibrous root; the root in question surrounds a column of epithelium. A possible bristle shaft is formed at the top of the column.

- 5 The distinctive feature of the telogen hair is the fully keratinized hair shaft surrounded by an epithelium sac.

In the underneath exists the secondary hair germ and dense dermal papilla waiting for the mysterious sign to initiate a new life cycle.

10

Hair dermal papilla cells are the mesenchymal cells found in the dermal papillae located at the bottom of the hair follicles.

These cells play a crucial role in hair formation, growth and cycle.

- 15 Hair follicle formation is generally stimulated by the convergence of dermal mesenchymal cells, the origin of dermal papilla cells, on the embryonic skin.

Hair dermal papilla cells are the mesenchymal cells found in the dermal papillae located at the bottom of the hair follicles.

20

These cells play a crucial role in hair formation, growth and cycle.

Hair follicle formation is generally stimulated by the convergence of dermal mesenchymal cells, the origin of dermal papilla cells, on the embryonic skin.

- 25 We have found that cultured dermal papilla cells also have say activity, and that if the culture process is carried out with keratinocyte-source conditioned medium obtained from the base, or a medium containing fibroblast growth factor, it does not lose the activity even during long-term processing.

- 30 Thus, the factors secreted by keratinocyte and fibroblast growth factor are important for maintaining the cellular properties of dermal papilla cells.

Even if the hair follicles were taken in vivo together with the hair matrix and dermal papillae from the vibrissal follicles, a new hair matrix and papilla may be formed from the rest of the follicle, and a hair shaft grows again in time.

- 5 Dermal papilla cells and highly possibly dermal sheath cells are capable of inducing and forming hair follicles in favorable ambient conditions.

Efforts have been made to identify genes and proteins associated with hair formation activity of dermal papilla cells. Like other groups, we have successfully isolated molecules that
10 specifically externalize dermal papilla cells. The nature of hair production factors can be understood through studies on these molecules.

Application of CTS treatment:

It is injected by a doctor with an electronic and precision instrument to allow a balanced
15 dosage to be distributed under the skin. This instrument is used to inject CTS stimulators into a depth of 1 and / or 4 mm (the depth that can vary depending on the individual's skin's structure and condition). The process takes approximately 20-30 minutes.

Significant improvement points compared to the conventional FUE method:

20 - This technique has succeeded with natural active ingredients to protect existing hair and stimulate newly placed hair follicles and blood circulation in the skin and without the need for chemical agents such as minoxidil (vasodilantantia) / finasteride (5-alpha blocker).

- During the ASI process, weak and damaged grafts are converted into an emulsion through
25 an improved method. The mixture is then separated schematically into the donor and transport area by injections. In addition to the CTS before transplantation, PRP (Plasma Rich Platelet) is applied to the transplantation area after planting.

-CTS therapy provides rapid healing of donor site (donor area), strengthening of weak grafts
30 and accelerating blood circulation of head skin.

- Telogen effluvium (shock loss) occurs in 5% and 10% of the patients, i.e. hair loss can occur in the coin diameter or larger areas due to the procedure trauma, and this is minimized by CTS treatment.

The lotion and injectable biological active ingredients we use are made from natural raw materials. Article names are mentioned above.

When the whole system is fully applied with the combination of vitamins, minerals and CTS treatments, very high-level results are achieved.

Here, the hair transplantation is presented as a whole package/system (graft removal, separation procedure (single / multiple graft)) by a specialized team; the graft is placed considering the proper growth of the depth and placement channels and the hair follicle. Then it is very important to stimulate with extra vitamin cure and special shampoo and to apply CTS treatment in the required periods.

4th week, 4th month, 6th month, and 9th month. Some of these controls can also be done online. During these checks, many problems can be timely solved. It should be acknowledged that post-operative care has a significant role in carrying success to these levels.

The application of this technique enhances the absorption capacity of vitamins and minerals, hair follicles and anti-radical activity.

The technique is supported with extra vitamins and special shampoos that increase the result. The content of the elements used as auxiliary agents in the treatment of hair transplantation is as follows.

CT Vitamin Preparation:

Keratin, methylsulphonylmethane (msm), Alfalfa, Equisetum arvense (Extract of horsetail), Pine bark Extract, Ruscus aculeatus (butcher's broom), orthosiphon stamineus, Bamboo extract, stinging nettle, N-acetyl-L-cysteine, Vitamin B5 (Calcium-D-pantothenate), Vitamin E (DL-alpha-tocopheral), kelp (varec), Niacin (nicotinamide) Vitamin B3, Betacarotene provitamin A, Vitamin B2 (Riboflavin), Biotin (D-Biotin), Selenium (sodium selenite), vitamin D3 obtained from lanolin.

There is no added aroma, coloring, yeast, milk, sugar, lactose or preservatives in the content.

CT shampoo:

Water, lauryl glucoside, coco-glucoside, coamidopropyl betaine, citric acid, sodium benzoate, perfume (natural), potassium sorbate, glyceryl oleate, hydrolyzed wheat protein, niacinamide, msm (methylsulfonylmethane), silicea, keratin, caffeine, vitamin D3, vitamin E, vitamin b12, b6, b1, pyridoxinehydrochloride, aloe barbadensis leaf juice, panthenol.

5
Content of the CTS stimulator: Water, Phenoxyethanol, Glutathione, Tocopherol, Menaquinone-7, Panthenol, Biotin, Ethylhexylglycerin, sodium hyaluronate, vitis vinifera, methylsilanol mannuronate.

10 Explanation of pictures

Figure 1 Injection and graft injection

Figure 2 Injection of grafts into the scalp

Description of references

- | | | |
|----|-----|--------------------|
| 15 | 1 | Injector |
| | 1.1 | Injection Edge |
| | 1.2 | Pull-Push Edge |
| | 2 | Grafts |
| | 3 | Epidermis |
| 20 | 4 | Dermis |
| | 5 | Subcutaneous Layer |
| | 6 | Donor Area |
| | 7 | Reception Area |
| | 8 | Plantation area |

25 Description of the Invention

The hair strands in the skull are composed of hair follicles that are embedded in the skin and the hair body in free state. The epidermis (3) section of the skin is the section that is visible from the outside and contains the exit section of the hair strands. Dermis (4) is the layer where
30 the blood vessels and hair follicles of the sebaceous glands are located, and grooving and transplantation is performed in this layer. The subcutaneous layer (5) is the section containing the fat tissue and blood vessels.

Injection of the grafts (2) into the dermis (4) layer without grooving is done by means of the injector (1) shown in the figures, from the reception area (7) which is predetermined within the donor area (6). The injector (1) injects the grafts (2) from the injection edge (1.1) to the layer of dermis (4) in the sowing area (8) at the appropriate level (1) without performing any cut-off which is the result of grooving in the layer of the epidermis (3) and dermis (4) .

The weak or damaged grafts (2) are converted into an emulsion mixture and the grafts (2) which have been converted into the emulsion mixture are then separated by the injectors (1) into the donor and transplantation area.

The injector (1) consists of the injection edge (1.1) and the pull-push edge (1.2). The prepared grafts (2) are drawn into the injector (1) by the absorption of the grafts (2) to the injector (1) from the injection edge (1.1) in desired amounts by pulling the pull-push edge. The following embedding into dermis layer (4) is made by pushing the pull-push edge (1.1) with the injector (1) and moving the grafts (2).

CLAIMS

1. The present invention is a hair transplantation method that reduces the hair growth process, reaches a higher number of hair follicles in one session and increases hair growth success in spite of genetic causes, and characterized by:

- 5 - Depending on the thickness and area of the skin (head/forehead), determination of the groover/punch/knife as well as slit, injector, etc. or method of injecting hair follicles into the hairy area before the treatment,
- Shortening the hair in the reception area (7) in the donor area (6) at the neck, determination of area where the grafts (2) will be removed and application of local anesthesia to this area.
- 10 - If any, the weak hair follicles in the reception area (7) are detected, CTS stimulants, which provide scalp stimulation and vitamin mineral support to the neck to reduce the risk of shock-loss, are applied with the help of a pistol having injection,
- Removal of multiple grafts (2) from the reception area (7) by means of punch appropriate to the scalp, hair type, thickness of the scalp and bleeding rate,
- 15 - If it is not possible to open channels without damaging the existing hair, but if there are areas where the hair is thin, weak and damaged grafts are separated and injected between the hair follicles without opening the channel with the ASI method.
- Separation of multiple grafts (2) according to the number of hair strands and maintaining them in appropriate degree and preparation for transplantation,
- 20 - Determination of the planting area (8),
- Starting the grooving process in the planting area (8) by referring the person's own hair exit angles
- In the absence of hair, starting the grooving process according to the natural exit angles determined,
- 25 - Determination of the grooving depth in accordance with the length of the graft (2), the bleeding rate in the scalp, the blood clotting process and the health status of the person,
- Plantation of the grafts (2) at the depth having the most intense blood circulation in the plantation layer,
- After the grooving process is completed, plantation of the grafts with single to the front and
- 30 multiple to the backs,
- On the 4th day of the operation, the first washing process is carried out and it is continued until the the shells will be shed on the 18th day.
- Starting vitamins and mineral preparations as of the 7th day,
- Starting the FUE CT hair shampoo as of the 18th day,
- 35 2. The present invention is stimulator consisting Aqua (Water), Phenoxyethanol, Glutathione, Tocopherol, Menaquinone-7 , Panthenol, Biotin, Ethylhexylglycerin, sodium hyaluronate, vitis vinifera, methylsilanol mannuronate used in hair transplantation method that reduces the hair

growth process, reaches a higher number of hair follicles in one session and increases hair growth despite genetic causes, as mentioned in claim 1, and stimulates the blood circulation in the skin and keeps the condition of the skin at high levels.

3. The present invention is a shampoo consisting water, lauryl glucoside, coco-glucoside, coamidopropyl betaine, Citric Acid, Sodium Benzoate, perfume (natural) potassium Sorbate, glycerol oleate, hydrolyzed wheat protein, niacinamide, msm (methylsulfonylmethane), silicea, keratin, pyridoxinehydrochloride, aloe barbadensis leaf water, panthenol used in hair transplantation method that reduces the hair growth process, reaches a higher number of hair follicles in one session and increases hair growth despite genetic causes, as mentioned in claim 1, and characterized by including

Caffeine, vitamin D3, vitamin E, vitamin b12, vitamin b6, b1.

4. The present invention is a vitamin preparation consisting Keratin, methylsulfonylmethane (msm), Alfalfa, Equisetum arvense (Horsetail extract)), Bamboo extract, N-acetyl-L-cysteine, Vitamin B5 (Calcium-D-pantothenate), Vitamin E (DL-alpha-tocopheral), kelp (varec), Vitamin B2 (Riboflavin), Biotin (D-Biotin) used in hair transplantation method that reduces the hair growth process, reaches a higher number of hair follicles in one session and increases hair growth despite genetic causes, as mentioned in claim 1, and characterized by including

Selenium (sodium selenite), vitamin D3 from lanolin, Pine bark extract, Ruscus aculeatus (butcher ns broom), orthosiphon stamineus, stinging nettle, Niacin (nicotinamide) Vitamin B3, Betacarotene provitamin A.

5. The present invention is a hair transplantation method that reduces the hair growth process, reaches a higher number of hair follicles in one session and increases hair growth despite genetic causes, as mentioned in claim 1, and characterized by

the injector's (1) pulling of the grafts (2) from the pull-push edge (1.2) to its chamber via the injection edge (1.1),

the entry of the injector's (1) injection edge (1.1) to the appropriate spots in the dermis layer (4) and its injection of the grafts (2) to these spots through the pull-push edge (1.2).

1/2

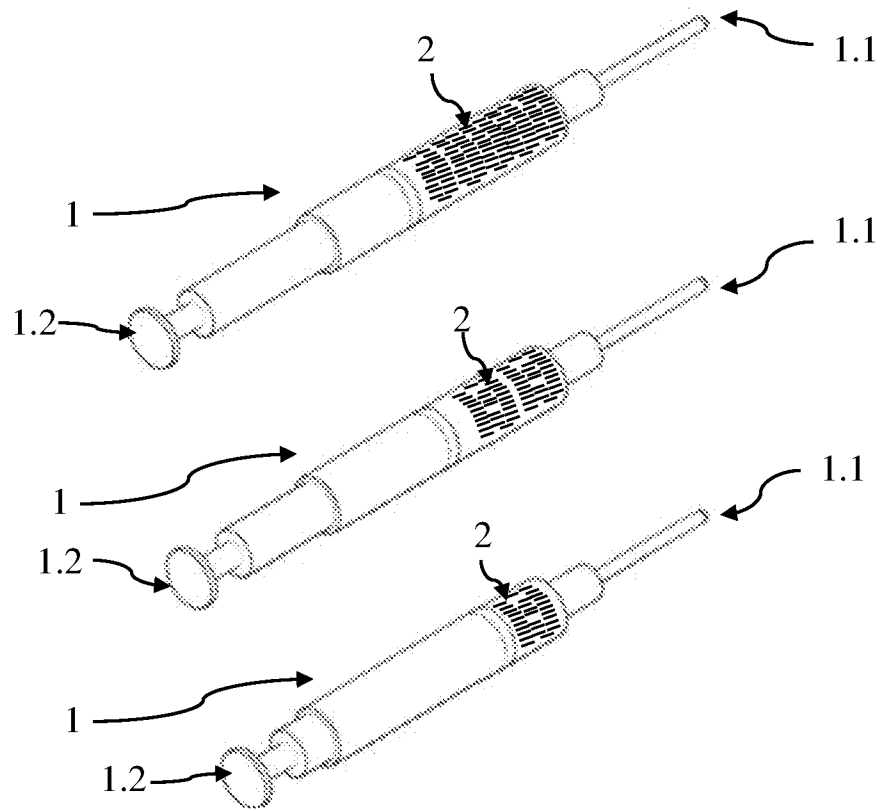


FIGURE 1

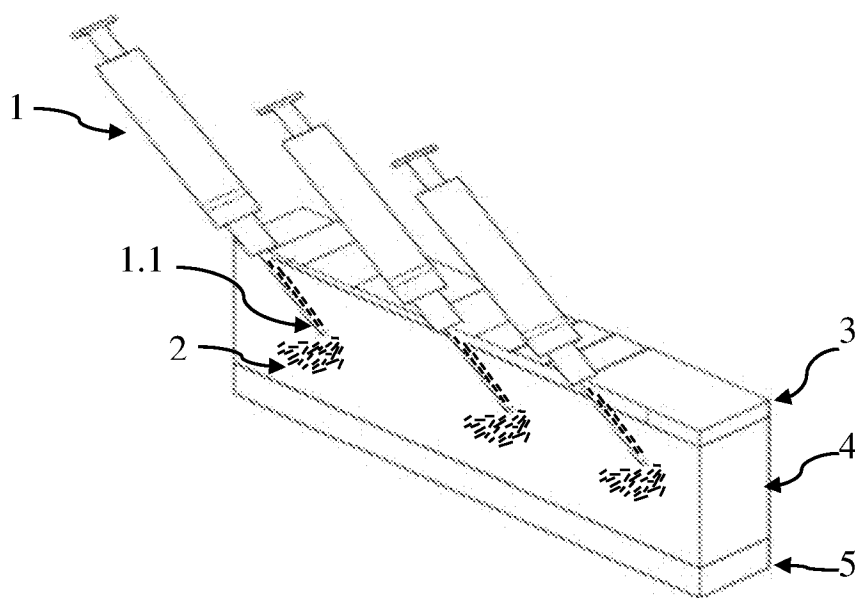


FIGURE 2

2/2

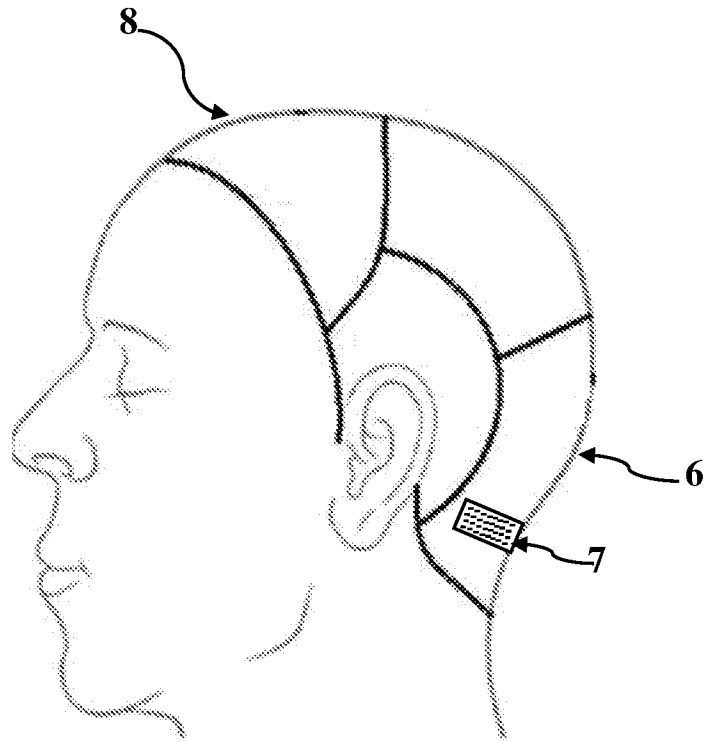


FIGURE 3