

A precious chance for muslim hijab women of all the world to keep their hair scalp safe and not to incur praxox alopecia

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ABSTRACT

The scope of this research is to develop a revolutionary formula for a shampooing apt only for Muslim Hijab girls and women who, because of the fact that are forced to cover their hair scalp, are more prone than others to baldness, excess of sebum production and hair brittleness and dandruff. We have created a special shampoo that could remedy some incongruities remarkable in hair scalp of females who never have contact with air, sun or revitalizing physical agents. We have stated that after 7 daily applications of the cosmetic product onto hair scalp, before to go to bed, a suggestive lowering of sebum production may be recorded, and sebum is the chief cause of baldness and itching and dandruff, especially when hair is covered and cannot transpire at all. Hijab girls and women may remedy their own problems, due to religious tenets, by the daily usage of a shampooing, as it is recognized that Muslim females have more time for themselves, than other women of other cultures and traditions.

Key words: Hijab woman; Sebum production; Cholecalciferol; Squalene; Musa sapientum peel extract

INTRODUCTION

Muslim hijab women and girls represent a huge amount of individuals that are forced and/or like, for sake of their religious credos, to cover their face and head when in public spaces, throughout the entire world so that a neologism has been created, that is Eurabia.

This coinage indicates the complete fusion between Moohummudan Culture and Occidental Traditions, and thus the cult of Hijab is rather common and widespread.

It is indeed curious to stress that some countries exist which could be declared “burqa-ban”, for instance, Albania where Government has introduced a draft legislation to ban the hijab in public schools, Belgium where several by-laws have been draft on face-covering clothing to ban public wearing of the niqab and burqa, Denmark, where the need for passengers to show their

faces in airports is mandatory, Estonia, where the Ministry of Justice is going to prepare a bill that would ban wearing a burqa or niqab in public spaces, such as state offices, schools and hospitals, France, where the 2004 French law on secularity and conspicuous religious symbols in schools bans all clothing which constitutes an ostensible religious symbol from government-operated schools (according to the holy principle of Laïcité), Germany, where the states of Baden-Württemberg, Bavaria, Hesse, Lower Saxony, Saarland, Bremen, North Rhine-Westphalia contain restrictions on wearing the hijab by female teachers and the city-state of Berlin that banned all religious symbols in public institutions, including the Christian crucifix and the Jewish kippah, Italy where Law 152/1975 – which prohibits the use of motorcycle helmets to evade identification – cannot be extended to cover the veil or burqa even if Region Lombardy has banned facial veils for security reasons in government buildings and hospitals, in December 2015, Kosovo, where headscarves in schools

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were banished since late 2009 because Kosovo is proclaimed secular territory, The Netherlands, where Government Parliament in January 2012 enacted a ban on face-covering clothing, popularly described as the “burqa ban” and where offenders can be fined up to 390 euro even if the prohibition does not apply to face covering that is necessary for the health, safety or the exercise of a profession or practicing a sport, although some events such as Sinterklaas, Carnival, Halloween or when a mayor granted an exemption for particular kermises are excluded, Switzerland, where in September 2013, by popular referendum approved by 66% of the voters, the canton of Ticino prohibited to hide the face in a public area, and finally Norway, Spain, Sweden and United Kingdom where this matter is controversial till today, due to politic, more than religious, diatribes.

Here follows a quotation referred by a woman speaking Urdu (that is the lingua franca of Pakistan and other Indian states) that has been retrieved in a forum [1] where Muslim women and girls argue about the concern of the pro and contra of wearing hijab: “If your hair is covered all day it can cause sweat and sebum to build up and deposit on your scalp and cause itching and dandruff...”.

Other cybernauts decree the following assertions: Tying up wet hair is already known to be damaging to the roots of the hair, but it can even worse for hijabis because the hair doesn't get to naturally dry and stays tied up for hours. Tying up wet hair adds another element to the dreaded condition of ‘hijab-hair’ since the hair ends up drying flat against the scalp so that when you remove your hijab, probably hours later, your hair is flat and limp.

And moreover:

Given the fact that you wear hijab pretty much all day, chances are your hair and scalp probably don't see much sunlight. And depending on what kind of neighbourhood you live in, it might not be feasible for you to just sit outside in your background with your hijab on.

So we suggest opening up in the blinds and curtains in your home and sitting in the sunniest part of the house for at least half an hour a week. Vitamin D is essential for the hair and scalp, and just because you keep your

hair covered doesn't mean that your hair can't get any! So let in the sunlight and soak up some rays.

And furthermore:

When you come home, take your hijab off! Open up your hair, take out that hair tie, and run your fingers through the hair and scalp to get some circulation going. Some of us wear hijab for several hours a day, depending on our lifestyle, and our hair doesn't really get to breathe. So maximize those hours when you're home and don't have to cover up- let your hair loose and let your scalp breathe.

The chief problem of hijab women is represented by flourishing of dandruff, sebum and by a very scarce microcirculation, due to the fact that transpiration (the so-called breathing) of hair scalp is foreclosed [2-6].

A shampooing mousse to suggest to keep off Muslim hijab girls and women from hair damage, shall keep on account of the hypersecretion of sebum and dandruff, the quasi-total absence of incidence of sun rays (that represent the source of life and indisputed benefit for hair and skin as well) and the scarce or reduced microcirculation.

A shampooing product apt to loose these problems shall contain:

- 1) A surrogate of human sebum, apt to avoid sebaceous glands producing too much sebum (by means of the phenomenon of the pharmacological negative feedback, similarly to the action displayed by phytosterols which are able to low the LDL in blood serum). Sebum contains a variety of different lipids, including cholesterol, glycerides, fatty acids, squalene, and wax and cholesterol esters, even if the exact composition of sebum varies with a person's age.
- 2) A natural antidandruff agents (Musa sapientum peel and pulp extract and brown rice vinegar) [7]
- 3) Cholecalciferol (vitamin D3), that recently has achieved resounding success for topical use in case of xerotic stratum corneum and keratinocytes in general [8], even if in absence of sun rays incidence. It must be considered that Cholecalciferol is prohibited as cosmetic ingredient, even though cholecalciferol-PEG 12 ether is admitted.
- 4) An activator of microcirculation, and for this we have chosen caffeine derived from Theobroma cacao.

MATERIALS AND METHODS

We have created the formula of a shampooing mousse that contains the following ingredients: Aqua; Potassium oleate; shea butteramide/castoramide dea; Sorbitol; Caprylic/capric glycerides; Squalene; Cholesterol; Cholecalciferol peg 12 ether; Musa sapientum peel extract; Musa sapientum pulp extract; Brown rice vinegar; Cyamopsis tetragonoloba gum; Caffeine; Preservatives and Antioxidants q.s.

We have moreover selected nine volunteers (hijab women and girls, aged from 18 to 60 y.) who had previously declared to wear hijab more than 10 hours pro day and to wash their hair scalp twice a week, using a normal shampooing product.

Seven of the nine individuals suffer from excessive dandruff and sebum hypersecretion (A,C,D,E,G,H,I); two of them,(B,F) indeed, were prone to alopecia praecox.

It is utterly arguable if the baldness would have occurred in these two individuals, whenever they had never worn hijab, albeit the two cases assert they have no family history of alopecia, of whichever type.

The shampoo we have ideated was consigned to the nine individuals, which were prayed to use it every day for one week, each afternoon before to go to sleep, rigorously their hair loose.

We have been able to detect the decrease of the spontaneous sebum production by the aids of a Sebometer (SM 810. Courage- Khazaka electronic) apt to measure the sebum quantity in $\mu\text{g}/\text{ft}^2$ and we have the starting measure made the first day (before the first application of our cosmetic system) and afterwards the second, the third, the fourth, the fifth, the sixth and the final evaluation every morning, applying the sebometer onto the scalp of each of every volunteer.

We plotted the results in the following Table 1 and commented the success of the activity of the shampoo

by calculating the percentages of the decrease of sebum production.

In Table 2 the percentages of decrease of sebum production recorded for every volunteer are plotted.

It is remarkable that in case F, the individual most prone to praecox alopecia, the initial production of sebum is the most consistent, before treatment, but the percentage of decrease of sebum secretion is evidently drastic.

Two are the plausible theories to explain this phenomenon in women (idest in the Female pattern alopecia).

The former is based on the fact that the angle of follicles and resultant sebum building-up in women is different respect to men: effectively, the angle at which hairs come out of a female scalp allows the sebum to “run off”, whereas the angle of hairs on a male scalp can lead to oil blockage.

The latter hypothesis is that scalp skin contains more clusters of inflammatory cells than

almost all other areas of non-scalp skin. These cell clusters are often very close to follicles, and they contain immune cell types that are not normally present in healthy skin and do contain mastzellen, lymphocytes and neutrophils.

The increasing of the amount of inflammatory cells usually indicates a response to some odd that may occur to damage scalp skin, and in this case the reactions are represented by an excessive production of sebum followed by a progressive hair loss.

Albeit, when sebum production decreases, due to the negative feedback evoked by the surrogate of human sebum applied onto hair scalp, even hair loss must diminish as well.

Table 1: Values of sebum production detected during the treatment by means of the Sebometer

Progressive day of evaluation	A	B	C	D	E	F	G	H	I
1 st day	89801.09	87564.30	91896.21	87965.23	88635.22	86915.45	89991.07	88673.28	92785.40
2 nd day	79905.90	76854.22	80988.72	82117.04	86342.50	80177.76	84768.39	81243.56	89553.28
3 rd day	71581.79	70785.39	69997.87	72451.02	71425.68	72463.28	79265.34	77354.68	78635.37
4 th day	58101.56	57356.20	58739.22	57979.89	56342.10	55472.19	54879.33	57362.85	57999.98
5 th day	54868.53	53681.29	54687.33	56397.60	55315.54	52314.98	51888.97	53672.30	54712.55
6 th day	47139.00	46377.98	44978.33	46891.32	45389.99	47325.11	46983.25	47320.21	46782.41
7 th day	43097.72	41223.89	42561.89	40897.24	41667.23	42576.78	41889.99	41342.87	40235.48

Table 2: Percentages of decrease of sebum production recorded for every volunteer

Volunteer	Percentage of lowering of sebum production
A	47
B	47
C	46
D	46
E	47
F	48
G	46
H	46
I	43

CONCLUSION

It is noticeable that a stratagem of a daily usage of a shampooing product apt to reduce sebum hypersecretion and consequently to avoid dandruff, itching and praecox alopecia in women who cannot let their hair scalp “breathe”, could be forecasted as a Columbus’ egg.

It is notorious that the majorpart of all the trademark shampoos of all over the world do contain salts (designed as soaps) of sodium or other alkaline or alkaline earth metals with aliphatic acids,

(they represent the surface active agents tout court), and especially sodium lauryl sulphate has been pointed since decades as a progressive hair damaging agent [9-11].

So, a shampooing that contains Potassium oleate as detergent, idest Savon de Castille (or Marseille soap) and other ingredients apt to decrease the sebum production is really welcome especially by women and girls who has not the chance to let their hair to “transpire”, because their hair is almost always covered and suffocated by fabric and veils.

Statement of Human and Animal Rights

All procedures followed were in accordance with the ethical standards of the responsible committee on

human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2008.

Statement of Informed Consent

Informed consent was obtained from all patients for being included in the study.

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