

Proposal of Employ of Niacin at Massive dosage for Topical Use in Male Weak Penis erection

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Abstract: Recent studies demonstrate that prior application of an emulsion containing niacin as vasodilator favours subsequent luminous treatments.

Aims of my research is to demonstrate that niacin administered topically at strong dosage s can allow vasodilatation of the helicine arteries of penis,keeping on account the surface area of the exposed skin to the drug and thus the morphology itself of the flaccid penis,independently to the concentration and duration of exposure of the same vitamin.

Keywords:male erection,niacin,phallometer,Hatanaka-Morimoto'srule,vasodilatation of helicine arteries of penis.

I. Background

Helicine arteries of penis,it is well known,undergo the double parasympathetic and/or sympathetic stimuli.The former maintains the smooth muscles lying in the center of the artery,keeping the artery coiled by a poor blood flowing.The latter instead removes

the tonic state and allows vasodilation of the intimal cushion,with blood flushing in the corpora cavernosa,yielding to the sexual arousal,the so-called erection.

Recent studies carried by cosmetic surgery researchers demonstrate that prior application of an emulsion containing niacin(0.5-10%) as vasodilator favours subsequent luminous treatments especially the newest type soft laser.(1,2,3). The diffusive flux of niacin in vitro(J,according to Hatanaka-Morimoto's rule,that is expressed in mol/m²s-1, measured in Bronaugh horizontal cells) is 5.7(it must be pointed that Hatanaka-Morimoto's J for benzoic acid,which is almost all absorbed through safe skin,is 48,6) but when hydrogels containing little percentages of lipophilic drugs like niacin are involved,the model must take into account that not all water carrying a lipophilic chemical that comes into contact with skin stays on the skin long enough to allow absorption.Only that portion of a chemical in the solution that stays in contact with the skin is available for absorption.This may be modeled using water adherence factors as postulated by Gujral(4) and it is well known that these indirect parameters are as follow:

- a) the surface area of skin exposed.
- b) the duration of exposure(in minutes)
- c)the concentration of the chemical drug dispersed in aqueous system
- d) the octanol/water partitioning coefficient that gives reason of how easy is for the chemical to get through the skin.

Thus,the octanol/water partitioning coefficient of niacin is:

LogPo/w=-0.59; pH4, 25°C;-2.34;pH7,25C

So the Po/w coefficient corresponds to 0,693147 and that indicates that niacin,being lipophilic,panders to the same Hatanaka's equation corrected by Bartosova Bajgar,so that its percutaneous absorption follows the equation:

$$J = -D \frac{\delta c}{\delta x}$$

Where J is the rate of transfer per unit area (flux)(mol/m²s-1.),C is the concentration gradient(gcm-3),x is the linear distance traveled (cm) and D is the diffusion coefficient,proportional to the octanol/water partitioning coefficient, and x subliminal value since the thinnest stratum corneum in human body is retrievable in the penis and eyelids where is only 6 layers of cells deep,instead of other parts of the body where it is 60-85 layers of cells deep.

Aims of my research is to demonstrate that niacin administered topically at strong dosages(more than 10% as heralded by other A.A.) can allow vasodilatation of the helicine arteries of penis,keeping on account the surface

area of the exposed skin to the drug and thus the morphology itself of the flaccid penis, in dependently to the concentration and duration of exposure of the same vitamin.

It is awesome that results show that, minor is the surface of skin exposed to the identical dose of niacin, the major is the sexual arousal (calculated by the aids of a PPG, penileplethysmograph, alias the Freund's phallometer and thus the penis circumference at its highest elongation), the rapidity in the erection evocation by the aids of manual stimulation (calculated in minutes) and the longest is the duration of the sexual performances with the habitual partner, recounted by the same volunteers that be haved as primeactors of the coitus, after the application of an hydrogel containing niacin 12%.

II. Materials and methods

I have had the chance to recruit 8 men (each of every one is 45 y. old, A, B, C, D, E, F, G, H) endowed by the eight kinds of penis morphology and scarce penis bloodflow (that is a weak erection, due to manifold psychological causes, but not physiopathological ones, that do not absolutely concern this current issue).

The aforesaid types of male penis are designed, according to certain vernacular neologism, so commonly used nowadays, as:

- a) Mushroom
- b) Button
- c) Curved
- d) Ribbed
- e) Anteater
- f) Beercan
- g) Needle
- h) Monkey

The habit of wearing boxers or slips in each individual is to be kept on account and is plotted in Table I, although the eight subjects have been prayed not to use alcoholics and excitant spices or chew tobacco for an entire week before the experiments and even to avoid sexual intercourses the day before the same study.

Table I reports the underwear used by the volunteers (the eventual conclusions about results pertain to the province of Andrologists and surely even Angiologists)

Subjects	Habitude of wearing boxers (B) or slips (S)
A	B
B	S
C	S/B
D	B
E	B
F	B
G	S
H	S/B

Table II reports the usual circumference of the flaccid and erected penis of all the 8 volunteers (The circumference values of the erected penis recorded in this table do not coincide with the scores recorded by the PPG).

Subjects	Circumference of flaccid	Circumference of erected (cm)
A	7.1	11.5
B	8.2	12.3
C	5.1	15.4
D	6.6	13.6
E	9.2	12.9
F	8.9	15.5
G	6.7	14.5
H	9.9	16.1

Table III reports the number of the sexual intercourses of the volunteers pro week with the same partner or spouse and the duration in minutes (data are measured subjectively, obviously and referred bonafidei), keeping on account that they have no had sex acts and/or coitus the day before the experimentations.

Subjects	Sexual intercourses pro week	Average Duration of sexual Performance in minutes
A	3	20
B	5	15
C	2	10
D	4	20
E	2	15
F	6	10

G	3	15
H	4	5

Initially, Baseline CDUS (Colour Doppler Ultrasound) were performed onto all the 8 volunteers' penis, to demonstrate the full length integrity of the cavernous arteries. The CDUS dynamic tests were entirely normal even in the three cases with the weak erections (a, e, h), and these data are useful to declare that no physical or pathological anomaly is to be recorded for the eight men.

So, the aforementioned hydrogel made up with xanthan gum (1.5%), niacin (12%), ginkgo biloba glyceric extract (2%) was prepared and consigned to the eight volunteers to test at three different times, that is in three diverse experimentations that forecast three methods of scoring results as follow:

- 1) Manual stimulation test after the application of the hydrogel, watching at thumbnails depicting sexual acts and/or completely naked individuals, in order to evaluate the time in seconds to reach the sexual arousal (and this corresponds to a subjective impression and discussions of the final scores pertain to the province of psychologists)
- 2) Measurement of sexual arousal using the Penile Plethysmography (PPG), that is the Freund's circumferential transducer, a special device created by the same Freund in 1957 in Czechoslovakia, apt to identify among military conscripts men who were falsely declaring themselves to be gay to avoid the draft. The device is a simple indium/gallium-in-rubber ring connected to an electromechanical Simmons and Ruge's strain gauge to be placed around the shaft of the subject's penis to measure every change in circumference, when the subject watches at porn pictures. The Freund's PPG employed in this study has been assembled in the labs of the Department of Physics at my University.
- 3) Duration of the sexual intercourse with the habitua l partner, and the experience can be exclusively recounted by the same volunteer, only if his coitus is realized by a real and determined enthusiasm, reflecting his own male pride and esprit de revanche with regards to his own conscience of being considered not fully virile. It is superfluous to specify that men who accepted to have their dimension measured by Freund's PPG (and all the 8 volunteers did it willingly), declared to desire to try the same experience before to apply the hydrogel, in a prior session, especially because really intrigued by the apparatus and curious to state their virility and their attitude to the vis coeundi.

III. Results

In Table IV are plotted all the results and each of every experiences should deserve an apposite discourse carried by a cohort of experts in angiology, sexuology, psychiatry, andrology and psychology.

The sole conclusion I can infer is that minor is the surface of skin exposed to the identical dose of niacin (that correspond to the morphologies of a smaller penis) the major is the sexual arousal (calculated by the aid of a PPG that is capable to indicate only the trend to a complete erection) the rapidity in the evocation of the complete erection by the aid of manual stimulation (calculated in seconds) and the longest is the duration of the sexual performances with the habitual partner, recounted by the same volunteer bonafidei.

Table IV: the results scored by the three methods of evaluation.

<i>Method of evaluation</i>	a	b	c	d	e	f	g	h
<i>Percentage of rapidity to get sexual arousal (in sec) achieved by the aid of manual stimulation</i>	55	61	18	21	19	22	17	13
<i>Percentage of complete Circumference of full erected penis measured by PPG</i>	100	100	88	76	81	100	100	69
<i>Duration of sexual performance (% of increase)</i>	42	38	20	33	21	44	51	16

IV. Conclusion

It is awesome that results show that, minor is the surface of skin exposed to the identical dose of niacin, the major is the sexual arousal and the longest is the duration of the sexual performances with the habitual partner, recounted by the same volunteers that behaved as prime actors

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