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Methatec MBH
Gerlenhofer Str. 4
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Muenster, July 06, 2001

date:

Dermatological expertise an a
four-week clinical-dermatological

APPLICATION TEST

for Cellulite treatment
including

elasticity test,

measurement of thigh circumference and morphological assessment
(„mattress phenomenon")

VACULIFT-device combined with special lotion

Client: **Methatec MBH**
Gerlenhofer Str. 4
89233 NEU - ULM

Testpersons: 20 female panellists aged between 21 and 74 years, all healthy skin, but presenting moderate to distinct Cellulite

Testperiod: 4 weeks

Test concentration: Utilisation of device and preparation according to instruction

PRINCIPLE AND METHODOLOGY

The purpose of this study was to examine the tolerability of the mentioned device according to clinical-dermatological test criteria and the effect concerning Cellulite- based skin changes.

The participants with slight to distinct Cellulite of the thigh- gluteal area were able to consult the physicians taking care of the test participants any day in case of any objective or subjective skin changes or if disturbed well-being were noted.

Before the commencement of the trial, all participants were dermatologically examined. Only women without any pathological skin changes besides Cellulite were included in the test group.

Each test person used the device twice daily at least for 10 minutes.

When required, the dermatologist could be consulted to observe the state of the skin.

Skin condition was controlled morphologically concerning so-called mattress phenomenon at 2 measuring sites in a monthly frequency (2 cm above top edge of patella and mid of inner thigh). Additionally skin elasticity before and after 4 weeks was determined. At last the circumference of the thigh was documented once weekly at 2 sites (2 cm above top edge of patella and 10 cm below inguinal).

PROBLEM

The journal " Vogue" was first to use the term "Cellulite" that describes a non-pathological aggregation of bloated fat cells of thighs, rear, hip and waist.

Almost every second woman develops Cellulite when ageing

Flagging connective tissue within skin ageing, reduced blood- and lymphatic circulation, perhaps lack of exercise and particularly genetic disposition are causes of this special, completely harmless forming of fat.

The approach for treatment are controversial in cosmetics and dermatology.

List of panellists

Panellists with slight to distinct Cellulite

Panellist -No.	Name	Gender	Age	Diagnosis
1.	R. D.	f	46	healthy skin
2.	J. St.	f	69	healthy skin
3.	Ch. K.	f	46	healthy skin
4.	R. W.	f	48	healthy skin
5.	E. K.	f	62	healthy skin
6.	G. T.	f	49	healthy skin
7.	A. T.	f	23	healthy skin
B.	N.T.	f	21	healthy skin
9.	C. V.	f	31	healthy skin
10.	G. R.	f	42	healthy skin
11.	B. T.	f	42	healthy skin
12.	E. G.	f	74	healthy skin
13.	W. K.	f	57	healthy skin
14.	B. L.	f	49	healthy skin
15.	R. Z.	f	45	healthy skin
16.	N. E.	f	32	healthy skin
17.	B. Sch.	f	31	healthy skin
18.	E. F.	f	69	healthy skin
19.	A. U.	f	38	healthy skin
20.	K. Sch.	f	61	healthy skin

Morphologic results

1. Mattress phenomenon

If both hands are laid onto Cellulite skin and pinch with both abducted thumbs and stretched fingers, skin appears rugose like the surface of an orange. This test is characterised as mattress phenomenon due to the impression of a small mattress with quilted retractions.

We divided the results into 3 grades (+, ++, +++) and measured before application and every 4 weeks.

Results before application

Panellist -No.	Name	Gender	Age	mattress phenomenon
1.	R. D.	f	46	+++
2.	J. St.	f	69	++
3.	Ch. K.	f	46	++
4.	R. W.	f	48	+++
5.	E. K.	f	62	+++
6.	G. T.	f	49	++
7.	A. T.	f	23	+
B.	N.T.	f	21	++
9.	C.V.	f	31	-H-
10.	G. R.	f	42	++
11.	B. T.	f	42	+++
12.	E. G.	f	74	++
13.	W. K.	f	57	
14.	B. L.	f	49	++
15.	R. Z.	f	45	+++
16.	N. E.	f	32	+++
17.	B. Sch.	f	31	+++
18.	E. F.	f	69	++
19.	A. U.	f	38	++
20.	K. Sch.	f	61	++

Results after 4 weeks

Panellist -No.	Name	Gender	Age	mattress phenomenon
1.	R. D.	f	46	++
2.	J. St.	f	69	++
3.	Ch. K.	f	46	+
4.	R. W.	f	48	++
5.	E. K.	f	62	+++
6.	G. T.	f	49	++
7.	A. T.	f	23	+
B.	N.T.	f	21	+
9.	C. V.	f	31	+
10.	G. R.	f	42	++
11.	B. T.	f	42	++
12.	E. G.	f	74	+
13.	W. K.	f	57	++
14.	B. L.	f	49	+
15.	R. Z.	f	45	++
16.	N. E.	f	32	++
17.	B. Sch.	f	31	++
18.	E. F.	f	69	++
19.	A. U.	f	38	++
20.	K. Sch.	f	61	+

Finally it can be stated that only slight morphological changes could be verified after 4 weeks.

2. Measurement of the thigh circumference

The measurement of the thigh circumference was conducted at 2 sites of the same leg before test start and then every 4 weeks. (1. about 2 cm above top edge of patella and 2. mid of thigh)

Results before application

Panellist -No.	Name	Gender	Age	Measurement of the thigh circumference in cm (1./2.)
1.	R. D.	f	46	43,5 / 57,5
2.	J. St.	f	69	46/58
3.	Ch. K.	f	46	46/57
4.	R. W.	f	48	45/65
5.	E. K.	f	62	47/59
6.	G. T.	f	49	45,5/66
7.	A. T.	f	23	43/65,5
B.	N.T.	♂	21	40/62,5
9.	C. V.	f	31	47/70,5
10.	G. R.	f	42	48/64
11.	B. T.	f	42	47,5/71,5
12.	E. G.	♂	74	54/70
13.	W. K.	♂	57	42/57,5
14.	B. L.	f	49	36/50,5
15.	R. Z.	f	45	43/59
16.	N. E.	f	32	45/57,5
17.	B. Sch.	f	31	42/58
18.	E. F.	f	69	48/66
19.	A. U.	f	38	40,5/59
20.	K. Sch.	f	61	43/56,5

Results after 4 weeks

Panellist -No.	Name	Gender	Age	Measurement of the thigh circumference in cm (1./2.)
1.	R. D.	f	46	42/56,5
2.	J. St.	f	69	46/556,5
3.	Ch. K.	f	46	45/59
4.	R. W.	f	48	44/63
5.	E. K.	f	62	45/59
6.	G. T.	f	49	42,5/64
7.	A. T.	f	23	43/65
B.	N.T.	f	21	40/61,5
9.	C. V.	f	31	46/67
10.	G. R.	f	42	50/65
11.	B. T.	f	42	46,5/67,5
12.	E. G.	f	74	56/73
13.	W. K.	f	57	42/57,5
14.	B. L.	f	49	38/51
15.	R. Z.	f	45	44/60
16.	N. E.	f	32	45/57
17.	B. Sch.	f	31	43/58
18.	E. F.	f	69	49,5/68
19.	A. U.	f	38	44/58
20.	K. Sch.	f	61	41,5/56,5

Differences of circumferences of thighs after 4 weeks

Panellist -No.	Name	Gender	Age	Measurement of the thigh circumference in cm (1./2.)
1.	R. D.	f	46	-1,5/-1,0
2.	J. St.	f	69	0/-1,5
3.	Ch. K.	f	46	-1,0/+2,0
4.	R. W.	f	48	-1,0/-2,0
5.	E. K.	f	62	-2,0/0
6.	G. T.	f	49	3,0/-2,0
7.	A. T.	f	23	0/-0,5
B.	N.T.	f	21	0/-1,0
9.	C. V.	f	31	-1,0/-3,5
10.	G. R.	f	42	+2,0/+1,0
11.	B. T.	f	42	-1,0/-4,0
12.	E. G.	f	74	+2,0/+3,0
13.	W. K.	f	57	0/0
14.	B. L.	f	49	+2,01+0,5
15.	R. Z.	f	45	+1,0/+1,0
16.	N. E.	f	32	0/-0,5
17.	B. Sch.	f	31	+1/0
18.	E. F.	f	69	+1,5/+2,0
19.	A. U.	f	38	+3,5/-1,0
20.	K. Sch.	f	61	-1,5/0

It can be stated in summary that the circumference of thighs of the panellists changed significantly when measured at 2 sites of the same leg after 4 weeks of test period.

A clearly positive effect of VACULIFT-device combined with special lotion is found already after 4 weeks.

3. Elasticity measurement

The elasticity measurement was conducted at 2 sites of the same leg (1. 2 cm above the top edge of patella, 2. 10 cm below inguinal of inner thigh)

Significant changes were also found here. In total, a clearly positive effect of the above mentioned product combined with special lotion could be confirmed. Details are recorded in elasticity report.

Summarising assessment of results

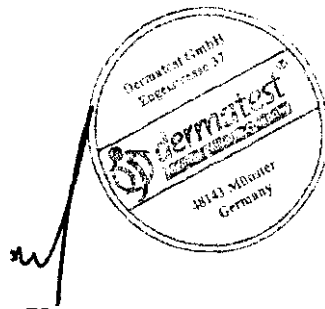
All of the 20 Cellulite panellists tolerated the VACULIFT-device combined with special lotion very well during the course of the four weeks test period under dermatological and clinical observation. There were no undesired or even pathological reactions.

It can, therefore, be concluded that for these participants the use of the product in practice does not lead to undesired skin reactions due to skin irritant or sensitizing characteristics.

Objective changes in elasticity were found as well as in so-called mattress phenomenon and the circumference of thighs in terms of successful treatment for 4 weeks.

This very positive effect could be improved by prolonging the application as the case may be.

The device seems to be suitable for Cellulite treatment.



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