Prevention and treatment of vitamin D deficiency in Dutch psycho geriatric nursing home residents by weekly half-body UVB irradiation after showering: a pilot study

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The aim of this pilot study is to investigate in a Dutch psycho geriatric nursing home population whether weekly half body UVB irradiation after showering is an efficient and in daily practice feasible method for the supplementation of vitamin D.

Ethical review	Approved WMO
Status	Pending
Health condition type	Fractures
Study type	Interventional

Summary

ID

NL-OMON32653

Source
ToetsingOnline

Brief title
vitamin D deficiency and UVB in Dutch nursing homes

Condition

- Fractures

Synonym
vitamin D deficiency

Research involving
Human

Sponsors and support

Primary sponsor: Vrije Universiteit Medisch Centrum
Source(s) of monetary or material Support: Ministerie van OC&W,European Sunlight Association en Samenwerking Verantwoord Zonnen

Intervention

Keyword: Nursing home, Ultraviolet B, Vitamin D Deficiency

Outcome measures

Primary outcome

Vitamin D status (serum 25(OH)D and some other biochemical parameters on

calcium homeostasis)

Secondary outcome

not applicable

Study description

Background summary

Vitamin D deficiency is common in older persons, in particular in residents of nursing homes. It may lead to muscle weakness, bone loss and therefore to fractures. Vitamin D supplementation decreases the risk of falls and fractures.

Vitamin D status in the elderly can be improved by oral vitamin D supplementation or by ultraviolet irradiation. Ultraviolet irradiation may have an extra positive effect on well being and health. While using ultraviolet irradiation vitamin D intoxication is negligible.

Although the elderly skin is still capable of producing vitamin D, it is not known whether in elderly nursing home residents, weekly half body irradiations can lead to adequate serum 25(OH)D levels.

Study objective

The aim of this pilot study is to investigate in a Dutch psycho geriatric nursing home population whether weekly half body UVB irradiation after showering is an efficient and in daily practice feasible method for the

supplementation of vitamin D.

Study design

pilot study on the effect of weekly half-body ultraviolet irradiation at half the *minimal erythemal dose*(MED) by using two 100W/12 UVB lamps: a so called *dose adequacy study*

Intervention

half-body UVB irradiation after showering, during 8 weeks, once a week with 1 SED = 0,5 MED

Study burden and risks

burden and risks are negligible: the two minutes UVB irradiaton takes place after showering. extra tansfers or not necesary/ 4 times blood sampling

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

age 70 years or older
coming outside in the sun once a week or less

Exclusion criteria

Skin cancer
Hypercalcemia and sarcoidosis
Known agression, anxiety, agitation or resistance to body contact

Study design

Design

Study type: Interventional

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Health services research

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-12-2008
Enrollment:	8
Type:	Anticipated

Medical products/devices used

Generic name:	UVB 100W/12 TL lamp
Registration:	Yes - CE intended use

Ethics review

Approved WMO Date:	13-11-2008
Application type:	First submission
Review commission:	METC Amsterdam UMC

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL24338.029.08