Poster No.; P1308

Title:

## A Unique Complex of Several Amino Acids Can Cure Patients with Atopic Dermatitis

#### Authors:

Koji NISHIKORI Ph.D., Takako SHIMANO and Hideo KOYAMA Laboratory of Aesthetic Immunology NPO (Non-Profit Organization) Japan Immune and Beauty Association (JIBA)

## Background (Objective)

- In Japan, the number of patients with atopic dermatitis (AD) has been remarkably increased but an effective treatment has not been developed yet.
- Koyama has researched and developed Palusiastasis (PS), a unique complex of several amino acids, for 25 years according to an endogenous retorovirus hypothesis on abnormality of immune system in dermatitis such as AD.

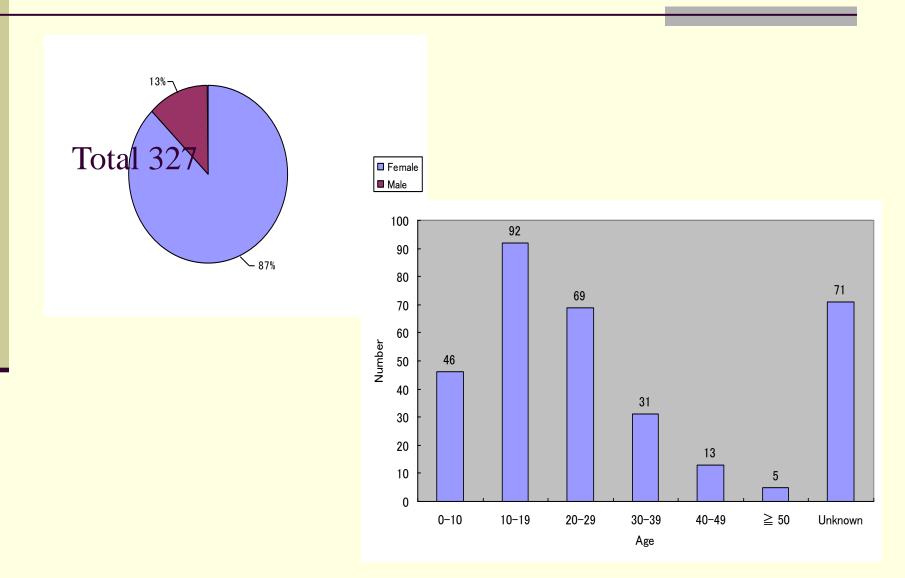
#### Method

- For longer than 15 years, Shimano has cured more than 300 AD patients using PS and the method to cure them of AD completely has been established.
- The basic method is an application of PS to their skin many times a day for 6 months to 1 year.

#### Results 1

- PS (a unique complex of several amino acids) had an extremely good therapeutic effect for the AD patients.
- Therapeutic effects of AD patients by PS including some typical cases are shown on the following 10 slides.
- PS could cure them of AD almost completely as far as it was not discontinued.
- PS also had a good therapeutic effect for the patients with other dermatitis (data not shown).
- Treatment of the AD patients with steroids preceding PS tended to delay the complete cure of AD by it, since the true recovery started after exclusion of steroids.

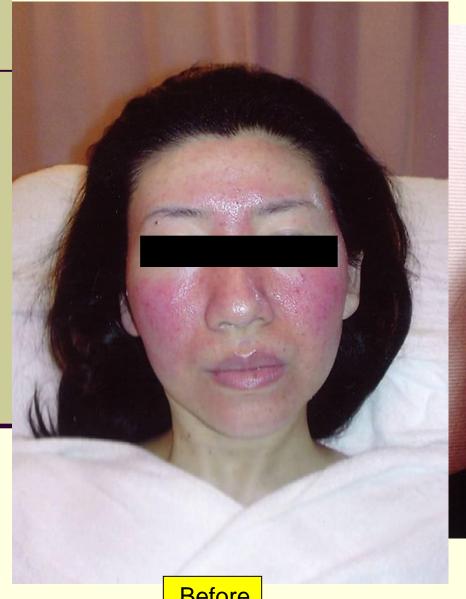
## Number of AD patients treated with PS



#### Female (28 years old), 6 months



#### Female (42 years old), 1 year





Before

#### Female (42 years old), 8 months





#### ■ Male (8 months old), 11 months





#### ■ Female (26 years old), 5 months



#### ■ Female (31 years old), 4 months





Before

Female (55 years old), 6 months





Before

After



Before

Female (26 years old),6 months



After



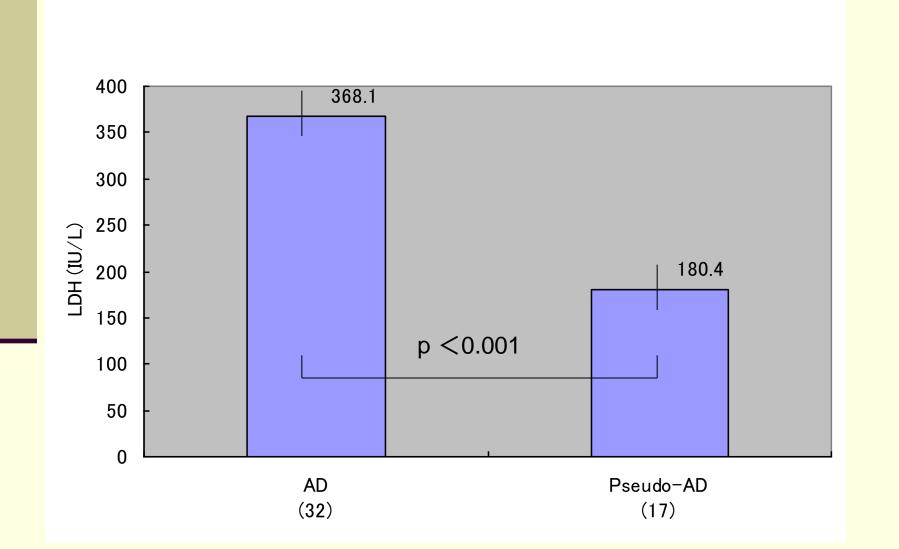
Male (32 years old),6 months



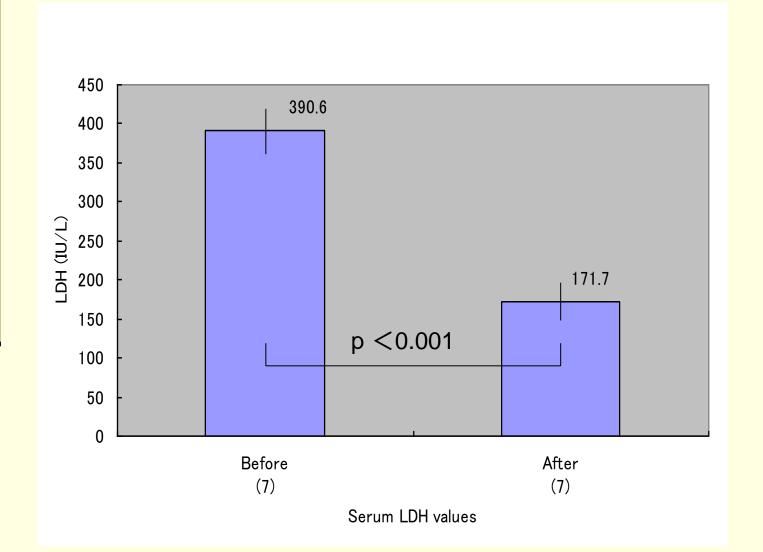
#### Results 2

- Approximately 65% of AD patients exhibited elevation of serum LDH value and the rest was not. We consider that AD patients with elevated serum LDH may be true AD.
- On the contrary, the values of serum lymphocyte in the group were significantly low (data not shown).
- Very interestingly, the high LDH values of the AD patients were lowered to the normal level accompanying with the therapy of AD by PS.

### Serum LDH values in AD patients



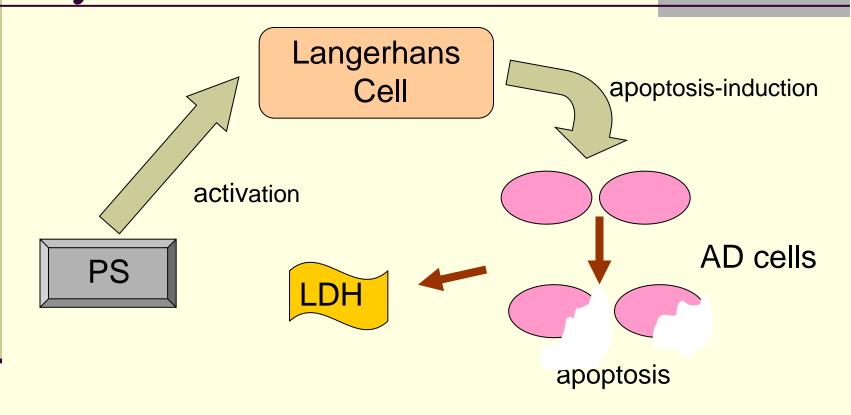
## Serum LDH values before and after treatment with PS



#### Discussion

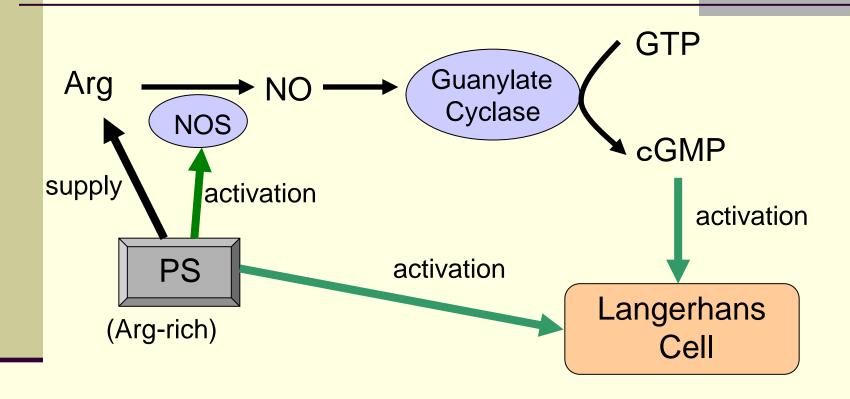
- PS may induce apoptosis of the AD cells.
- We consider that PS may activate the Langerhans cells that instruct apoptosis of AD cells through supplying Arg to NO (nitric oxide) or NOS (NO synthase) activation to cure AD patients.
- Further studies of the mechanism by which PS can cure the patients of AD must be performed.

# Apoptosis-induction of AD cells by PS



- PS-induced apoptosis
- Apparent aggravation at the early stage of treatment

### Role of NO



## Summary

- (1) PS (a unique complex of several amino acids) have an extremely good therapeutic effect for the AD patients as well as other dermatitis patients.
- (2) We can cure them by application of PS to their skin many times a day for 6 months to 1 year.
- (3) Treatment of the AD patients with steroids preceding PS tends to delay the complete cure of AD by it.
- (4) Approximately 65% of AD patients exhibit elevation of serum LDH value and the rest is not. On the contrary, the values of serum lymphocyte in the group are significantly low.
- (5) The high LDH values of the AD patients are lowered to the normal level accompanying with the therapy of AD by PS.
- (6) PS may induce apoptosis of the AD cells.
- (7) We consider that PS may activate the Langerhans cells that instruct apoptosis of AD cells through supplying Arg to NO (nitric oxide) or NOS (NO synthase) activation to cure AD patients.