

Findings on Pollinosis

through the "Pollen Extract G63" of Graminex Company

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Pollen Extract, containing a rich source of nutrition (amino acids, minerals, and vitamins), represents the birth of the next generation of plant substances that should not be overlooked. We would like to take the opportunity to report this time on Pollen trials in Pollinosis which causes unpleasant eye and nasal symptoms.

[Objective and Method]

Up until last year, the IG-E antibody with specificity for *Cryptomeria Japonica* (Japanese cedar) Pollen was measured and the medical histories were recorded for 9 patients who had Pollinosis.

The period of the trial was from 1 to 3 months. The pollen extract used in the trial was produced by Graminex Company in Ohio, USA from the pollen of raw materials such as rye, corn, and timothy hay (referred to as *Phleum pratense* in Japan) which were cultivated without using agrochemicals or genetically modified varieties. The pollen which has a double hull is not digested or absorbed even when ingested since it has strong resistance to acid and heat (cannot be destroyed even at 300°C). Graminex Company using a special technology is able to separately extract G60 (water soluble nutrition components) and GFX (lipid soluble components) and we received the product G63 which is a 20:1 combination of G60 and GFX.

The dosage was 6 tablets per day, three tablets each after breakfast and dinner. One 250 mg tablet contains 62.5 mg of pollen extract.

(The daily quantity 375mg as pollen extract)

[Results]

The evaluation was conducted on 7 persons since 2 of the 9 persons did not come to the Clinic.

Symptom Score

① Sneezing				
4 points Extremely Severe	3 points Severe	2 points Occurs a little	1 point Occurs not much	0 points No occurrence
② Nasal drip				
4 points Extremely Severe	3 points Severe	2 points Occurs a little	1 point Occurs not much	0 points No occurrence
③ Stuffy nose				
4 points Extremely Severe	3 points Severe	2 points Occurs a little	1 point Occurs not much	0 points No occurrence
④ Itching Eyes				
4 points Extremely Severe	3 points Severe	2 points Occurs a little	1 point Occurs not much	0 points No occurrence

Pollinosis ... Trials with Graminex Pollen Extract G63

Name	Age	Consultation Day	Symptom Score	IG-E Antibody	Complications	Concomitant medication	Items of special mention
K.S	57	March 2, 2005	12			Nasal Points Eye Points	Borborygmus evidenced
		April 1, 2005	12				
M. K	77	March 3, 2005	7	41.5	Prostate cancer	Allium sativum (garlic) bulbs	
		April 7, 2005		40.8			
		May 5, 2005	2	74.6			Symptoms improved
T. S	46	March 3, 2005	13				
		Did not come to the Clinic					
Y. N	48	February 18, 2005	5	1.0			Episodes of Nasal congestion 10 years ago. Sleeplessness with nasal mucus
		March 20, 2005	4	1.57			Itchy eyes and atopic dermatitis evidenced in mid-March during mass pollen dispersal. Symptom relief with single dose of Claritin.
		April 25, 2005		3.73			
M. S	51	March 8, 2005	6				
		Did not come to the Clinic					
K. N	57	March 8, 2005	7	1.66	D.M.HT. Sleep apnea syndrome		
		April 5, 2005	6	1.53			Nasal symptoms and facial burning

							sensation. Edema was better compared to the average year.
		May 3 (addition)		1.95			Symptoms lightened from mid-April.
E. H	43	March 8, 2005	7	Over 100			
		April 12, 2005	5	Over 100			
H. Y		March 3, 2005	10	6.16			
		April 14, 2005	10	96.1			
T. O	48	February 25, 2005	10	1.67			
		April 30, 2005	1	15.50			

Five of the seven subjects experienced improvement in symptoms and two evidenced no change. Five of the seven subjects evidenced an increase in the *Cryptomeria Japonica* IG-E antibody, one subject was not measured and the other subject was above 100 preventing comparison.

[Discussion]

Professor Hidenori Ichijou, Tokyo University and others in the research group of the Japan Science and Technology Agency have reported reactive oxygen attacks the intracellular phosphorylated enzyme "ASK1" and separates the binding with the protein. Eventually we were able to find that the separation becomes the trigger which causes vigorous "ASK1" activity; thereby, creating a large quantity of "proinflammatory cytokine" in the blood which causes inflammation and allergy. From this theoretical perspective, the allergy symptoms are thought to have been improved by the large quantity of anti-oxidant substances such as carotenoid contained in the pollen extract of Graminex Company. Additionally, hyposensitization therapy is conducted as a treatment for Pollinosis by injecting patients with pollen and the symptoms caused with respect to the IG-E antibody by the instability of an increasing and decreasing IG-E antibody count are thereby improved. In light of this, it can be conjectured that hyposensitization therapy has taken place by means of the pollen administration. However, even the pollen extract tested can be thought rather effective when considering that hyposensitization therapy takes between 2~3 years.

[Safety]

Only one subject experienced Borborygmus with no particular symptoms such as diarrhea evidenced.

5/20/2005