ALLERGY, VITAMINS

MORE RETRO VITAMIN D

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During my recent trip to London, I could get a brief glimpse into the 1932 book “Vitamin D” by Reed, Struck and Steck. As this volume is not available in a German library and as it was not allowed by the British library to travel, I took now the lengthy procedures of registering, waiting in the queue, before searching this book for any allergy related items.
It seemed to be worthwile, although with some unexpected results:
Vitamin D was not tested as a risk factor but as a cure of allergy! Table 26 shows an individual time course.

TABLE 26*

ULTRAFILTRABLE CALCIUM IN HAY-FEVER

Date	Total Calcium (Mg/100 Cc Plasma)	Ultrafiltrable Calcium (Mg/100 Cc Filtrate)	Percentage Ultrafiltrable Calcium	Treatment Units Vitamin D Xt,000 Daily	Symptoms
July 28	12.00	.....	.....	.....	None
Aug. 2	12.32	.....	.....	.....	None
Aug. 9	14.36	7.92	55.1	.....	None
Aug. 12	.....	.....	.....	.....	First hay-fever, mild, no asthma
Aug. 16	13.60	6.56	48.0	.....	Mild hay-fever
Aug. 23	.....	.....	.....	600	Slightly more severe, no asthma
Aug. 24	12.20	7.16	58.7	600	No change
Aug. 26	.....	.....	.....	1,000	First asthma, mild
Aug. 30	12.56	6.44	51.3	1,000	Moderately severe hay-fever, no asthma
Sept. 6	12.32	6.20	50.3	1,300	Moderate hay-fever, no asthma
Sept. 13	12.56	7.28	58.0	1,000	All symptoms less severe
Sept. 20	17.40	7.76	44.6	last dose	Entirely free of all symptoms
Oct. 13	15.20	8.68	57.1	.....	None

* No. 63. Adult male, relatively severe hay-fever and asthma for three years previous.

These data are somewhat difficult to interpret but I cannot see any effect with the current episode being mainly externally triggered. Table 13 furthermore summarized some animal experiments where mainly the series 3 and 4 are interesting.

TABLE 13

ANAPHYLACTIC RESPONSES IN GUINEA PIGS TREATED WITH VITAMIN D

Series	Conditions of Experiment	Number of Animals Used	Average of Maximum Drop in Body Temperature (Degrees Centigrade)	Percentage of Mortality
1.....	Normal guinea pigs given 1.0 cc. horse serum intraperitoneally	12	1.6	0
2.....	This includes all sensitized control pigs used throughout the experiments	108	5.4	35.1
3.....	0.5 cc. corn oil intraperitoneally 24 hours before sensitizing dose of horse serum	12	4.8	25.0
4.....	0.5 cc. viosterol intraperitoneally 24 hours before sensitizing dose of horse serum	12	5.4	33.3
5.....	0.05 cc. corn oil orally 7 days before sensitizing dose and during sensitization period	20	2.6	30.0
6.....	0.5 cc. viosterol orally 7 days before sensitizing dose and during sensitization period	20	2.7	40.0
7.....	0.1 cc. calcium gluconate intraperitoneally 7 days before sensitizing dose and during sensitization period	10	2.5	50.0

Again, I do not see something exciting here, given the experimental condition where vitamin D and allergen is not given at the same time. Another key sentence is on page 311:

Rappaport and collaborators have issued three reports on the use of excess vitamin D in the treatment of hay-fever and asthma, involving several hundred subjects and extending over four seasons. As an experienced allergist he evaluated the results as significantly beneficial in 92 percent of cases. There was some strong synergy between the vitamin and pollen desensitization. Extensive metabolic studies did not reveal the mechanism of action of the vitamin affecting protection against pollinosis.

Again, this is somewhat unexpected but maybe in line with some contemporary research of adult allergy desensitization. On the other hand page 214 reports what I expected