RECURRENCE RISK OF MS IN RELATIVES OF PATIENTS IN FLANDERS BELGIUM

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The lifetime prevalence of multiple sclerosis (MS) in the area of Flanders (Belgium) approaches 0,15 %.Flanders provides an unique opportunity to study familial aggregation in MS for several reasons : (1) the population is relatively stable and so families tend to stay in contact and (2) registry data are available to enable documentation of family structure.
A total of 675 MS index cases were randomly ascertained through MS centres, neurologists and general practitioners in the Flanders' region. Medical and age data were available for a total of 4171 first-degree,7660 second-degree and 9972 third-degree relatives.
Age-corrected familial risks were calculated for these relatives based on weighted population prevalences.

	Total	No with MS	Age-corrected risk % ± 95 % CI
mother	670	11	1.64 % ± 0.96 %
father	662	10	1.51 % ± 0.93 %
brothers	951	12	1.26 % ± 0.71 %
sisters	901	23	2.55 % ± 1.03 %
daughters	479	5	1.04 % ± 0.91 %
sons	508	0	0.00 % ± 0.00 %

These risks indicate that first degree relatives have a risk for MS which is approximately 10-fold over the general population-data. They are similar to a Canadian study.

THE USE OF 5-METHOXYPSORALENE FOR FATIGUE AND OTHER SYMPTOMS IN MS

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Five methoxypsoralene (5-MOP) -known in the context of PUVA-therapy of psoriasis- is like 4-aminopyridine (4-AP) a potassium channel blocker. In demyelinating nerves, otherwise insulated and inactive internodal located K^+ channels become free and activated, which impairs nerve conduction. Similar to 4-AP, which has been shown to improve some symptoms in MS, 5-MOP blocks this activation selectively.

We present a double-blinded placebo-controlled cross-over pilot study with 5-MOP (Psoraderm^R) in MS patients. Sixteen moderately to severely disabled patients with definite MS, known with temperature sensitive symptoms and fatigue, without a history of photosensitive or phototoxic reaction, agreed to participate. They took either placebo or a single daily dose of 20 mg 5-MOP during two periods of 5 weeks, which were interrupted by a wash-out period of one week.

At day 0 and after week 1, 3 and 5 evaluation was done by a blinded neurologist using a structured questionnaire, a standard neurological examination, the Fatigue Severity Scale, comments of the patients and care givers and a routine blood test.

Preliminary results in 10 patients do not suggest any important effect of 5-MOP at a dose of 20 mg/day in MS patients. On the other hand, no clear adverse effects were noted. A larger study in a greater and less disabled population using a higher dose is probably needed before any positive effect can be excluded.

The effect of ACTOVEGIN in Multiple Sclerosis patients.

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30 pwMS were treated with ACTOVEGIN (Deproteinized hemoderivative from calf blood). 15 cases with RRMS and 15 with SPMS. 10 patients for 1 year, 10 for 10 months and 10 for 6 months. Side effects were mild and transient and caused no withdrawals. ACTOVEGIN activates aerobic metabolism, increases oxygen intake and promotes introduction and utilization of glucose by cells. Processes with high energy requirement were also activated and accelerated. In 6 cases it was necessary to reduce the dose, just because these patients had an epileptic focus (MRI). 8 cases were accepted in an emergency situation, e.g., stroke and poor general status, with respiratory and urinary infection and decubitus ulcers. Conventional treatment (steroids, immunotherapy and plasmapheresis) was avoided; only antibiotics and general maintenance plus ACTOVEGIN in short slow bolus, 200 mg each 6 hs was used as a treatment. All of them recovered dramatically in 2-6 days, with particular improvement of the following parameters: cognitive level (Test DCT), trophic regeneration of ulcers, fatigability and general metabolic situation. In less severe forms of pwMS (EDDS & RMI scale), ACTOVEGIN was administrated daily (i/m). For long-term treatment, oral administration was used. Spasticity did not change, balance loss improved slightly.

Key words: RRMS Multiple Sclerosis Relapsing Remitting, SPMS (Secondary Progressive Form)
ACTOVEGIN: HAFSLUND NYCOMED PHARMA AG.LIBRA. Montevideo, Uruguay.

CYTOKINE SECRETION BY MONOCYTES OF R-R PATIENTS AFTER 4 MONTHS OF TREATMENT WITH NATURAL INTERFERON -BETA.

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The effects of the treatment with 6x 10^6 IU/week of natural IFN-beta (Serono) for 4 months on the cytokine secretion of 12 MS patients with relapsing-remitting form were assessed. The secretion from monocytes of IL1-beta, TNF-alpha, TGF-beta, IL-6 and IL-8 were evaluated 4 times each month in both treated patients and a group of 15 age-matched untreated MS patients with R-R form and with EDSS in the same range values. The results of the immunological tests were also compared with those of a group of 20 age-matched control subjects. In the first month of treatment, a significant reduction of the LPS induced IFN-gamma production by monocyte of the MS patients ($p<0.01$) was observed. The IFN-gamma production remained significantly lower for all months of treatment compared with that of the basal period and that of the control and untreated MS groups. The secretion of other proinflammatory cytokines (IL1beta, TGF-beta, IL-6) were only minimally affected. On the contrary, a significant decrease in the monocyte secretion of IL8, induced by LPS, was found as a consequence of the treatment with natural IFN-beta ($p<0.02$). The results of the present research confirm the finding of previous in vitro studies demostrating a modulatory effect of recombinant IFN-beta on the production of some inflammatory cytokines in MS.(1,2) Natural IFN-beta seems to exert a similar effect in vivo.

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