Are mast cells the key to multiple sclerosis (MS)?

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**M**S may not be an autoimmune genetic disease. Since the ninety-fifties the opposite statement has strangulated most scientific approaches to the understanding of MS. Mast cells are aggregated along venules in border zones of the MS-plaques, and if stimulated releases specific mediators as histamine, resulting in oedema formations normally observed in the early onset of MS, as well as proteases that may cause demyelinization. The numbers of mast cells in the plaque-border zones of females is approximately doubled from that in males, which may explain the fact that females are more inclined to developing MS than males. Mast cells may be stimulated by various stress phenomenon, which in itself forward the possibility that MS is a sociocultural phenomenon. This is also strengthened by the observation that fragments of secreted chromogranins from the entro-endocrine system stimulate mast cells to secretion. The fact that stimulated mast cells survive, and within weeks/months may fully reload, may explain the frequent relapsing-remitting alternating phases of MS.

**Biography**

Per Goran Krüger, professor emeritus. Studied biology in Bergen, Norway on mast cells in the brain of wake and hibernating hedgehogs. Studied the mechanism of histamine secretion from mast cells at Karolinska institute Stockholm, Sweden and at Inst. of pathology in Seattle, USA. In the seventies he opposed to the planned fluoridation of Norwegian drinking waters (Which never started after that). Last 30 years engaged in multiple sclerosis and points to the obvious connection to mast cells. Received students price for not using power point when teaching cell biology and histology.

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