

Free light chains identified in chronic rhinosinusitis

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Patients with chronic rhinosinusitis (CRS) have increased free light chain concentrations, particularly those with CRS with nasal polyps, according to a study published online July 5 in *Allergy*.

(HealthDay) -- Patients with chronic rhinosinusitis (CRS) have increased free light chain (FLC) concentrations, particularly those with CRS with nasal polyps (CRSwNP), according to a study published online July 5 in *Allergy*.

Tom Groot Kormelink, of Utrecht University in the Netherlands, and associates analyzed nasal tissue, nasal [secretion](#), and serum of patients with CRSwNP and CRS without nasal polyps (CRSsNP) to determine the presence of FLCs. The effect of different treatments on the expression of FLCs was examined.

The researchers found that patients with CRS had increased FLC concentrations in nasal secretion and mucosal tissue homogenates, and the increase was most prominent in patients with CRSwNP. The increase

in FLC in nasal polyp tissue was confirmed by immunohistochemistry. Treatment with methylprednisolone or anti-[interleukin-5](#) (IL-5) resulted in the reduction in systemic or local FLC concentrations, respectively, in patients with CRSwNP.

"The presence of FLC in CRSwNP and CRSsNP suggests a possible role in mediating the local [immune reaction](#) in the paranasal [cavities](#)," the authors write. "Furthermore, the decrease in local FLCs after treatment with anti-IL-5 presumes that IL-5 creates an environment that favors FLC production."

More information: [Abstract](#)
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