

# Chronic Rhinosinusitis With and Without Polyps

## *Differential Treatment With Bioregulatory Medicines*

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Chronic rhinosinusitis (CRS) is one of the most commonly reported diseases. More than 24 million office visits for CRS were described as far back as 1992, and this incidence has probably increased rather than decreased.<sup>1</sup> In the United States, the incidence of CRS is more than 10% in the general population.<sup>2</sup>

The pathogenesis of CRS is poorly understood. There is evidence for the role of bacteria and fungi as well as the presence of a deranged immune response in the sinuses and upper airways.<sup>2</sup> Deficiencies in the epithelial immune barrier function might compromise the interaction between the host and external stimuli, which may lead to an increased susceptibility to bacterial and fungal colonization in patients with CRS. *Chronic rhinosinusitis* is defined as a group of disorders characterized by inflammation of the mucosa of the

nose and the paranasal sinuses of at least 12 weeks' duration. Two classes of CRS exist, and these can be divided according to the T-cell responses seen in the mucosa.

According to Joe and Thakkar,<sup>3</sup> it is best to think of these as inflammation from either a neutrophilic or an eosinophilic origin. The eosinophilic classification refers to CRS with nasal polyps (CRSwNP), also associated with aspirin-exacerbated respiratory disease, asthma, and allergic fungal rhinosinusitis. The neutrophilic subtype refers to CRS without nasal polyps (CRSSNP). Children seem to experience CRSwNP more often.<sup>4</sup> This is also reflected in the cytokine profiles: CRSwNP has an up-regulated T-helper cell type 2 (Th2) profile and low T-regulatory cells, whereas CRSSNP has a Th1 profile<sup>5</sup> (see Figure). The pathogenesis of CRSwNP is described in Table 1.

Thus, it is important to adjust bioregulatory treatment in patients with these conditions. In CRSwNP, the immunomodulation is performed with Engystol. Engystol is used in this case because it has been shown to increase interferon- $\gamma$ , which will support the Th1 profile and balance the Th2 rigidity.<sup>6</sup>

In CRSSNP, the immunomodulation is performed with Traumeel. Traumeel has been shown to down-regulate the proinflammatory cytokines interleukin 1, interleukin 8, and tumor necrosis factor  $\alpha$ .<sup>7</sup>

The rest of the treatment stays the same for the two types, as illustrated with the protocol in Table 2. ■

### References:

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Table 1. Pathogenesis of Chronic (Eosinophilic) Rhinosinusitis With Polyps.

• Hypersensitivity immune reaction
• The initiating antigen is a fungus (non-invasive)
• Antigen-presenting cells secrete interleukin 10, recruit T cells
• Th1/Th2 imbalance
• A regulation rigidity into a Th2 profile occurs
• Eosinophilia ensues
• Eosinophils surround fungus
• Eosinophils secrete major basic protein, which chemically damages the mucosa
• Basophils and mast cells add to inflammation

Figure. Th1/Th2 balance.

Abbreviations: DHEA, dehydroepiandrosterone; IFN, interferon; IL, interleukin; TGF, transforming growth factor; Th, T-helper cell; TNF, tumor necrosis factor.

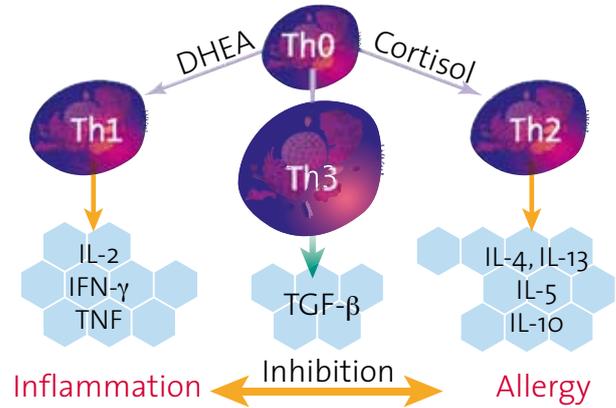


Table 2. Treatment for Chronic Rhinosinusitis With Nasal Polyps (CRSwNP) and Without Nasal Polyps (CRSsNP).

DET Phase	Basic and/or Symptomatic	Regulation Therapy <sup>a</sup>	Optional
Orodermal  Degeneration or impregnation (depending on the severity)	<ul style="list-style-type: none"> <li>• <b>Euphorbium compositum S/SN*</b> (CRSwNP and CRSsNP)</li> </ul>	<b>D&amp;D</b> <ul style="list-style-type: none"> <li>• <b>Advanced supportive detoxification and drainage<sup>b</sup></b></li> </ul> followed by <ul style="list-style-type: none"> <li>• <b>Basic detoxification and drainage: Detox-Kit<sup>c</sup></b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Echinacea compositum</b> (if there is severe infection)</li> </ul>
		<b>IM</b> <ul style="list-style-type: none"> <li>• <b>CRSwNP: Engystol N tablets</b></li> <li>• <b>CRSsNP: Traumeel S tablets</b></li> </ul> also as biopuncture (using the ampoules)	
		<b>OR</b> <ul style="list-style-type: none"> <li>• <b>Mucosa compositum</b></li> <li>• <b>Coenzyme compositum</b></li> <li>• <b>Ubichinon compositum</b></li> </ul>	
<b>Dosages:</b> Euphorbium compositum: 1 spray in each nostril up to 5 times per day. Regulation therapy: tablets: 1 tablet 3 times per day; ampoules: 1 ampoule of each medication, 1 to 3 times per week. Detox-Kit: 30 drops of each medication in 1.5 liters of water; drink throughout the day.			

<sup>a</sup> Antihomotoxic regulation therapy consists of a three-pillar approach: detoxification and drainage (D&D), immunomodulation (IM), and organ regulation (OR).  
<sup>b</sup> Advanced supportive detoxification and drainage consists of Hepar compositum (liver), Solidago compositum (kidney), and Thyroidea compositum (connective tissue).  
<sup>c</sup> The Detox-Kit consists of Lymphomyosot, Nux vomica-Homaccord, and Berberis-Homaccord.

\* Marketed as *Sinusin* in the United States.