# AGE-RELATED CLINICAL FEATURES OF THE EXUDATIVE FORM OF CHRONIC RHINOSINUSITIS

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The exudative form of chronic rhinosinusitis (CRS) is characterized by persistent inflammation of the nasal cavity and paranasal sinus mucosa, accompanied by pronounced hypersecretion of mucous or serous discharge. The clinical course of the disease largely depends on age-related physiological characteristics, which determine differences in pathogenesis, symptomatology, and therapeutic response.

I n childhood, exudative CRS is more often associated with adenoid hypertrophy, anatomical immaturity of the nasopharynx, frequent respiratory infections, and the formation of purulent-mucous exudate. The clinical presentation typically includes nasal obstruction, nocturnal cough, hearing reduction, and recurrent episodes of exacerbation. In young and middle-aged patients, allergic and vasomotor mechanisms predominate, often associated with impaired mucociliary clearance. Clinically, persistent nasal congestion, rhinorrhea, headache, decreased quality of life, and olfactory disturbances are the most prominent symptoms. In older age groups, atrophic changes of the mucosa, decreased local immunity, and frequent comorbidities (GERD, asthma, metabolic disorders) are noted. Symptoms are generally less pronounced; however, the disease tends to have a protracted and sluggish course, with low efficacy of standard therapy. Considering these age-related differences, early clinical and diagnostic stratification of patients with the exudative form of CRS is an important prerequisite for selecting the optimal therapeutic strategy and improving treatment outcomes.

**Study Aim:** To determine the age-related features of the clinical course of the exudative form of chronic rhinosinusitis and to assess disease severity in patients of different age groups in order to optimize diagnostic approaches and select the most effective therapeutic strategy.

**Materials and Methods:**

From 2020 to 2024, a study of 199 CRS cases was conducted. Patients ranged in age from 18 to 75 years, with the majority being of working age. Among all patients, 121 (60.8%) were men and 78 (39.2%) were women.

Out of the 199 patients, 43 (21.6%) had the exudative form of chronic rhinosinusitis. The study included 43 patients with chronic rhinosinusitis, distributed by age group and gender. Among them, 30 patients (69.7%) were men and 13 patients (30.3%) were women. The 41–55-year age group was the most represented (23 patients, 53.5%), followed by 26–40 years (8 patients, 18.6%), 18–25 years (6 patients, 13.9%), and 56–70 years (6 patients, 13.9%).

Regarding disease severity, the distribution by age was as follows:

Stage I: 3 patients, all aged 18–25 years.

Stage II: the largest number of patients (5 out of 11) were aged 26–40 years.

Stage III (the most common stage, 24 patients): predominated by the 41–55-year age group (19 out of 24).

Stage IV (the most severe stage): 5 patients, more evenly distributed among the 26–40, 41–55, and 56–70 age groups.

**Research Results**

The exudative form of chronic rhinosinusitis (CRS) demonstrates pronounced age-related differences in its clinical course, reflected in variations in pathogenetic mechanisms, symptomatology, and therapeutic response across different age groups. Among all patients examined with chronic rhinosinusitis, the exudative form was identified in 21.6% of cases, indicating its significant contribution to the overall structure of chronic inflammatory ENT diseases.

The highest prevalence of exudative CRS was observed in patients aged 41–55 years (53.5%), which may be associated with the peak of professional, immunological, and physiological stresses in this age category. Analysis of disease severity showed that Stage III was the most common (55.8%), predominantly among patients aged 41–55 years, confirming a more severe and prolonged disease course in middle-aged adults. In younger patients (18–25 years), exudative CRS more often presents as a mild form (Stage I), whereas in older age groups (56–70 years), there is a tendency toward a more protracted and sluggish course, with an increased proportion of severe forms.

**Conclusions:** These findings emphasize the necessity of early age-related stratification of patients with the exudative form of CRS to enable individualized diagnostic and therapeutic approaches, thereby enhancing treatment effectiveness and preventing disease progression.