



**CLINICAL FEATURES OF BRONCHIAL ASTHMA IN GIRLS WITH
SIGNS OF UNDIFFERENTIATED CONNECTIVE TISSUE DYSPLASIA:
A MULTIDISCIPLINARY APPROACH TO DIAGNOSIS AND
CORRECTION**

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Relevance: *Bronchial asthma (BA) is a common chronic disease among children, the pathogenesis of which is often complicated by comorbid conditions. One such condition is undifferentiated connective tissue dysplasia (UCTD), the prevalence of which, according to literature, reaches 30–60% among pediatric patients with allergic diseases [1,2]. The presence of dysplastic signs can aggravate the course of BA, reduce the effectiveness of therapy, and disrupt processes of sexual and somatic development.*

Keywords: *bronchial asthma, children, girls, connective tissue dysplasia, pubertal development, hormones, pediatrics.*

Aim of the Study. To assess the clinical-functional and hormonal features of bronchial asthma in girls with signs of UCTD to optimize approaches to diagnosis and correction.

Materials and Methods

A prospective observation of 98 girls aged 8 to 17 years was conducted, including:

- Group 1 (BA without CTD): 47 patients (23 aged 8–11 years, 24 aged 12–17 years)
 - Group 2 (BA + UCTD): 51 patients (16 aged 8–11 years, 35 aged 12–17 years)
- UCTD criteria included ≥ 3 phenotypic signs (joint hypermobility, flat feet, mitral valve prolapse, myopia, asthenic body type, skin hyperextensibility).





Assessment included: clinical severity of BA (GINA); spirometry (FEV₁, FVC); hormonal profile (LH, FSH, prolactin, testosterone); pubertal development (Tanner staging); pelvic ultrasound.

Results

In the BA + UCTD group:

- More severe asthma course: frequency of exacerbations ≥ 3 per year — in 72.5%, versus 38.3% in the group without UCTD ($p < 0.01$);
- Delayed menarche (> 14 years) — in 29.4% of patients versus 10.2% ($p < 0.05$);
- Elevated prolactin levels — in 41.1% (vs 18.7%);
- Elevated testosterone — in 37.2% (vs 15.3%);
- Pubertal delay (Tanner stage < 2 at age 13–14) — in 26.4% of girls with UCTD.

Spirometry:

- Mean FEV₁ in the UCTD group was $68 \pm 6.4\%$ of predicted, versus $82 \pm 5.8\%$ in the non-dysplasia group ($p < 0.05$).

Conclusion

The presence of undifferentiated connective tissue dysplasia in girls with bronchial asthma is associated with a more severe course, disorders of pubertal development, and deviations in hormonal profile. This necessitates a multidisciplinary approach including follow-up by a pediatric endocrinologist, cardiologist, and orthopedist, as well as development of individualized treatment and nutritional support plans.

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