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MINISTRY OF SECONDARY AND HIGHER EDUCATION

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CLINICAL IMMUNOLOGICAL FEATURES OF OBSTRUCTIVE BRONCHITIS IN CHILDREN WITH ATYPICAL MICROFLORA

MONOGRAPHY

HEALTH CARE – 510000

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Clinical immunological features of obstructive bronchitis in children with atypical microflora / Kudratova Z.E. and others – Hamilton: Accent Graphics Publishing and Communication – 2024. – 94 p.

ISBN 978-1-77192-664-5

DOI: [10.29013/CIFOOBICWAM.KudratovaZ.E.andothers.94.2024](https://doi.org/10.29013/CIFOOBICWAM.KudratovaZ.E.andothers.94.2024)

The monograph summarises literature data and long-term research of the Samarkand State Medical University team devoted to the issues of diagnosis, clinic, treatment tactics of acute obstructive bronchitis in children with atypical microflora. The monograph is intended for paediatricians, general practitioners, masters, clinical residents and students of medical institutes.

Signed to print 27/11/2024. Format 60×84/16.

Offset Paper: Garniture Minion Pro. Pec. liter. 11. Edition of 500 copies.

Typeset in Accent Graphics Publishing and Communication, Hamilton, Canada

Printed by Allegra Complex,

1290 Venables St #7, Vancouver, BC V6A 4B4, Canada

ISBN 978-1-77192-664-5

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LIST OF ABBREVIATIONS

ACC	– acetylcysteine
BO	– bronchobstruction
WHO	– World Health Organisation
CNS	– central nervous system
RS virus	– respiratory syncytial virus
OB	– obstructive bronchitis
AOB	– acute obstructive bronchitis.
ARVI	– acute respiratory viral infection
ECG	– electrocardiography
IFA	– enzyme-linked immunosorbent assay
mAbs	– monoclonal antibodies
pAB	– polyclonal antibodies
PCNSD	– perinatal central nervous system damage
RF	– respiratory failure
ESR	– erythrocyte sedimentation rate
SamSMU	– Samarkand State Medical University
SBRSC EMC	– Samarkand branch of the Republican Scientific Centre for Emergency Medical Care
USE	– ultrasound examination
ARD	– acute respiratory diseases
PCR	– polymerase chain reaction
ELISA	– enzyme-linked immunosorbent assay
PI	– positivity index
OD	– optical density
ChI	– Chlamydia infection
MI	– mycoplasma infection
INF	– interferon
IgA	– immunoglobulin A
IgM	– immunoglobulin E

INTRODUCTION

Today, the steady increase in the number of respiratory system diseases is the most relevant area of modern paediatrics. Lower respiratory tract diseases are characterised by various clinical and morphological manifestations, often leading to bronchial obstruction. According to recent studies '...bronchobstructive syndrome is the initial manifestation of various pathological conditions of respiratory organs, in 30–50% of cases determines the severity of the course of the underlying disease and its prognosis' [1]. At present, early diagnosis of acute obstructive bronchitis of atypical aetiology in children, identification of risk factors, prescription of etiopathogenetic therapy for the prevention of relapses taking into account the peculiarities of clinical and laboratory manifestations and prevention of the disease are among the tasks that need to be solved in medicine.

A number of scientific studies are being conducted worldwide to apply modern diagnostic methods to determine the etiological factors of acute obstructive bronchitis in children and to improve the methods of etiological treatment. In this regard, conducting scientific research on the timely identification of the etiological factor of acute obstructive bronchitis in children, characterisation of anamnestic and data features of the clinical course, indicators of cytokines and humoral immunity, determining their relationship, development of etiopathogenetic methods of treatment, as well as improving the set of measures to implement effective methods of treatment is important. The country is implementing comprehensive measures aimed at the development of the medical sphere, in particular early diagnosis of bronchopulmonary pathology, improvement of methods of treatment and prevention of the disease, and certain results have been achieved. In this regard, tasks such as '...increasing the level of accessibility of quality medical services for mothers and children, providing them with specialised and high-tech medical care, implementing comprehensive measures to reduce infant and child mortality' [1].

Based on these objectives, it is necessary to determine the frequency of atypical microflora in acute obstructive bronchitis of atypical etiology in children, to analyse the diseases occurring in their mothers during pregnancy, to determine the peculiarities of the clinical course of the disease, identify disorders in the immune system (immunoglobulins IgA, IgE and

pro-inflammatory cytokines IL-1 β , IL-6, IL-8 and INF- γ), the developed diagnostic algorithm and treatment schemes will prevent disability and relapse of the disease caused by complications of the disease.