## PLASMAPHERESIS IN FIBROSING ALVEOLITIS

Plasmapheresis (PA) in fibrosing alveolitis raises the efficiency of standard pharmaceutical anti-inflammatory therapy and allows to reduce its volume.

### INDICATIONS

- Exogenic allergic alveolitis:
  - in cases with sharply pronounced clinical symptoms and respiratory insufficiency for accelerate elimination of the allergen (sometimes plasmapheresis can be an alternative of administration of systemic glucocorticosteroids (GCS):
    - in chronic course of the disease, in spite of cessation of the influence of the allergen and performing of adequate pharmaceutical treatment (the courses can be repeated each 6-12 months)

- Idiopathic fibrosing alveolitis and alveolitis associated with “diseases of connective tissue”:
  - cases of pronounced inflammatory infiltration of pulmonary tissues, revealed by X-rays and computed tomograms (CT)

### CONTRAINDICATIONS

- Hypoproteinemia
- Pronounced anemia and/or thrombocytopenia

### CRITERIA OF EFFICIENCY

- Reduction of clinical manifestations
- Reduction of diffuse interstitial changes in the lungs on an X-ray and a CT
- Improvement of indicators of the function of external breathing, diffusion ability of the lungs, gas composition of the blood
- Ceasing of progression of the disease without intensification of pharmaceutical treatment
- Possibility of reducing the dosage of GCS without progression of the disease
- Achievement of compensation of concomitant diseases, preventing application of adequate pharmaceutical therapy

---

For more information visit our web site: [www.plasmatech-fzc.com](http://www.plasmatech-fzc.com) or contact us by e-mail: plasmatechfzc@aol.com
PLASMAPHERESIS IN PULMONOLOGY

**PLASMAPHERESIS IN SARCOIDOSIS OF RESPIRATORY ORGANS**

Plasmapheresis (PA) in sarcoidosis is an additional method of treatment, used in combination with standard pharmaceutical antiinflammatory therapy, when it is not sufficiently efficient or cannot be performed in full amount.

<table>
<thead>
<tr>
<th>INDICATIONS</th>
<th>CONTRAINDICATIONS</th>
<th>CRITERIA OF EFFICIENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases with high activity of the disease, except for the Loefgre’s syndrome (under which exists high probability of spontaneous regression)</td>
<td>Hypoproteinemia</td>
<td>✔ Reduction or disappearance of clinical manifestations</td>
</tr>
<tr>
<td>Chronic or progressing course of the disease, in spite of the therapy applied</td>
<td>Pronounced anemia and/or thrombocytopenia</td>
<td>✔ Reduction of the size of the augmented intrapectoral lymphatic nodes, of diffuse infiltrative and granulomatose changes in lungs on an X-ray and a CT</td>
</tr>
<tr>
<td>Presence of contraindications for administrating an adequate dose of glucocorticosteroids (GCS) (ulcer of the stomach and duodenum, arterial hypertension, diabetes mellitus, osteopenia and others), bad tolerance of GCS</td>
<td></td>
<td>✔ Ceasing of progression of the disease without intensification of pharmaceutical treatment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✔ Possibility of reducing the dosage of GCS or their cancelling without development of exacerbation in patients with recurrent course of sarcoidosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✔ Achievement of compensation of concomitant diseases, preventing application of adequate GCS therapy</td>
</tr>
</tbody>
</table>

For more information visit our web site: [www.plasmatech-fzc.com](http://www.plasmatech-fzc.com) or contact us by e-mail: plasmatechfzc@aol.com
**PLASMAPHERESIS IN BRONCHIAL ASTHMA**

Plasmapheresis (PA) in bronchial asthma is an additional method of treatment to be used in combination with standard pharmaceutical bronchodilatant and antiinflammatory therapy, when it results insufficiently efficient or there are contraindications for glucocorticoid therapy application.

<table>
<thead>
<tr>
<th>INDICATIONS</th>
<th>CONTRAINDICATIONS</th>
<th>CRITERIA OF EFFICIENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Presence of frequent exacerbations in severe course of the disease, in spite of performing adequate standard pharmaceutical therapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>➢ Development of exacerbations of steroid-dependent bronchial asthma of grave course in case of reduction of the dose of systemic glucocorticosteroids (GCS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>➢ Hypoproteinemia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>➢ Pronounced anemia and/or thrombocytopenia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

✔ More rare incidence or cessation of suffocation attacks

✔ Reduction of the need for inhalations of agonists of short action

✔ Possibility of reducing the dose of GCS by 20-50% (and, accordingly, the frequency and gravity of complications due to their using) with conservation of control of the course of bronchial asthma

For more information visit our web site:  [www.plasmatech-fzc.com](http://www.plasmatech-fzc.com) or contact us by e-mail:  plasmatechfzc@aol.com
PLASMAPHERESIS IN PULMONOLOGY

PLASMAPHERESIS
IN PATIENTS WITH TUBERCULOSIS OF RESPIRATORY ORGANS
IN THE PHASE OF PROGRESSION

Tuberculosis of respiratory organs in the phase of progression (caseous pneumonia, fibrous-cavernous, infiltrative tuberculosis, empyema of pleura) is characterized by development of sharply pronounced exudative inflammation with the following caseous-necrotic modifications of with disintegration of caseous masses.

Thereby appear tissular signs of the DVS-syndrome (breach of blood circulation, plethora, stasis).

Clinically, the phase of progression runs with sharply pronounced symptoms of tuberculous and suppurative intoxication, bronchoobstruction, insufficiency of nutritive status.

<table>
<thead>
<tr>
<th>INDICATIONS</th>
<th>CONTRAINDICATIONS</th>
<th>CRITERIA OF EFFICIENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute and chronic suppurative and tuberculous intoxication</td>
<td>LSN in the stage of decompensation</td>
<td>✓ Reduction or complete liquidation of the symptoms of intoxication</td>
</tr>
<tr>
<td>Symptoms of bronchial obstruction</td>
<td>Blood spitting</td>
<td>✓ Positive dynamics of the indicators of clinical blood test (Hb, Ht, bacilonuclear shift, lymphocytes, spe), factors CIB, medium mass molecules</td>
</tr>
<tr>
<td>Chronic DVS-syndrome</td>
<td>Pronounced hypoproteinemia</td>
<td>✓ Positive dynamics of the indicators of coagulogram</td>
</tr>
<tr>
<td></td>
<td>Non-drained suppurative focus</td>
<td>✓ Increasing of efficiency of the basic therapy and improvement of the subjective condition of patients</td>
</tr>
</tbody>
</table>

For more information visit our web site: www.plasmatech-fzc.com or contact us by e-mail: plasmatechfzc@aol.com
PLASMA-PHERESIS IN PULMONOLOGY

PLASMA-PHERESIS IN PATIENTS WITH TUBERCULOSIS OF RESPIRATORY ORGANS AND CONCOMITANT PATHOLOGY

Tuberculosis is a chronic process, which flows wave-like with symptoms of tuberculosis and purulent intoxication. Exacerbation of chronic diseases on the part of the other organs and systems of the organism complicates, and sometimes compels to stop the specific therapy.

<table>
<thead>
<tr>
<th>INDICATIONS</th>
<th>CONTRAINDICATIONS</th>
<th>CRITERIA OF EFFICIENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Acute and chronic purulent and tuberculosis intoxication</td>
<td>➢ LSN in the stage of decompensation</td>
<td>✓ Reduction or completely liquidation of the symptoms of intoxication</td>
</tr>
<tr>
<td>➢ Chronic DVS-syndrome</td>
<td>➢ Blood spitting</td>
<td>✓ Leveling of manifestations of associated diseases as a result of reduction of endotoxicosis and improvement of microcirculation in the affected organs</td>
</tr>
<tr>
<td>➢ Bronchial obstruction</td>
<td>➢ Pronounced hypoproteinemia</td>
<td>✓ Increase of efficiency of the basic therapy</td>
</tr>
<tr>
<td>➢ Bad tolerance of antituberculosis preparations</td>
<td>➢ Non-drained suppurative focus</td>
<td></td>
</tr>
<tr>
<td>➢ Exacerbation of associated diseases (viral hepatitis “B” and “C”, pancreatitis, pyelonephritis, reumatoide polyarthritis, ulcerous disease (without signs of bleeding), diabetes mellitus in the stage of decompensation, complicated by angiopathies)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more information visit our web site: www.plasmatech-fzc.com or contact us by e-mail: plasmatechfzc@aol.com
PLASMAPHERESIS IN PULMONOLOGY

PLASMAPHERESIS
IN PATIENTS WITH TUBERCULOSIS OF RESPIRATORY ORGANS, WHICH TREATMENT WAS COMPLICATED BY INTOLERANCE OF ANTITUBERCULOSE PREPARATIONS

Treatment of any form of tuberculosis must be adequate, regular and long.

Contemporary schedules of treatment suppose taking from 4 to 5 antituberculosis preparations.

Quite often toxico-allergic reactions (dermatitis, neurodermatitis, urticaria, medicamentosis hepatitis) appear in patients, which require cancelling medicinal preparations.

### INDICATIONS
- Dermatitis
- Neurodermatitis
- Hives
- Edema of mucous membranes
- Medicamentous hepatitis, accompanied by hyperfermentemia, eosinophilia, leucopenia

### CONTRAINDICATIONS
- LSN in the stage of decompensation
- Bloody expectoration
- Pronounced hypo-disproteinemia

### CRITERIA OF EFFICIENCY
- ✔ Reduction or complete liquidation of clinical manifestations of toxic-allergic reaction
- ✔ Normalization of the blood indicators
- ✔ Restitution of the basic therapy in a shortest period
- ✔ Improvement of the subjective condition of the patients

For more information visit our web site: [www.plasmatech-fzc.com](http://www.plasmatech-fzc.com) or contact us by e-mail: plasmatechfzc@aol.com