

**CARBOXYTHERAPY – A PROMISING METHOD  
FOR THERAPY OF DEGENERATIVE CHANGES  
IN THE SUBCUTANEOUS TISSUE AND THE DERMIS (CELLULITE)**

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**Introduction.** Over 95% of women of mature age have cellulite, which is directly related to the level of female sex hormones - estrogens. Cellulite is a kind of hypertrophy of adipose tissue, which is the result of the process of fat deposition due to the imbalance between its synthesis and decay, which is accompanied by the accumulation of water, toxic substances, changes in the vascular wall, damage to surrounding tissue. Factors that can cause cellulite are: exogenous (unhealthy diet, insufficient physical activity, bad habits) and endogenous (diseases of the endocrine, immune, cardiovascular, etc.). A variety of precipitating causes in the future may become more and more.

**Aim.** The pharmacological rationale for the use of carboxytherapy for the treatment of cellulite.

**Results and discussion.** Cellulite treatment consists of two problems: cleansing tissues from metabolic products of cells and restore normal blood and lymph flow in them; the destruction and removal from the body of excess fat. These tasks may work for carboxytherapy. CO<sub>2</sub> therapy-beauty treatments for face and body, which represent intradermal or subcutaneous injection of gaseous carbon dioxide (CO<sub>2</sub>) for therapeutic purposes. Fat cells are very sensitive to the injection of CO<sub>2</sub> changes the acidity fat cells and part of them are destroyed mechanically, as CO<sub>2</sub> is injected into the subcutaneous fatty tissue under pressure, and parts of fat cells "burn" actively invades the tissues with oxygen. At the same time, the carbon dioxide causes vasodilation and increased blood flow in the subcutaneous tissue, which leads to increased lipolysis - the process of digestion of fat and eliminates stagnation of lymph in tissues and improves the elimination of toxins.

**Conclusions.** Carboxytherapy thanks fiziologicheskim properties of CO<sub>2</sub> enhances the effects of known treatments for cellulite: lymphatic drainage, compression therapy, different techniques of lipolysis and physiotherapy.