



FEATURES OF THERAPY WITH HERBAL PRODUCTS OF BELLADONNA (*ATROPA BELLADONNA L.*)

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Relevance. Belladonna, being a perennial plant, it is considered widespread throughout Asia Minor. The plant material is harvested primarily in plantations, the leaves during flowering, and the herb during fruit ripening. Belladonna roots are of interest as the primary raw material for therapeutic agents. All parts of the plant are poisonous and contain the alkaloids atropine, scopolamine, and hyoscyamine: 0.14-1.20% in the leaves, 0.2-0.65% in the herb, 0.24-0.6% in the flowers, and 0.7% in the ripe fruit.

Purpose of the study. The purpose of this study is to study the characteristic features of belladonna in herbal medicine.

Materials and methods. The main resources we used in our research were a textbook on phytotherapy, the Atlas of Medicinal Plants of Uzbekistan, a textbook on phytotherapy, a textbook on clinical pharmacology, and articles on the anatomical and morphological structure of the belladonna plant, its distribution, and the collection of medicinal plant materials.

Results. The main alkaloid of belladonna is atropine, so all pharmacological properties are characterized by this alkaloid content. Atropine plays a significant role in its pharmacological effects by blocking M-cholinergic receptors. In other words, it blocks nerve transmission from the end of the postganglionic portion of the parasympathetic nerves to tissues (organs). This blocks the postsynaptic membrane-choline receptor, located at the tissue level where the action of the neurotransmitter acetylcholine occurs. All these properties characterize its use in medicine. Herbal preparations of belladonna are used in ophthalmology to dilate the pupil to allow viewing of the interior of the eye, and also to determine the degree of myopia and prescribe glasses accordingly. Belladonna preparations are widely used for bronchial asthma, bradyarrhythmia, gastric and intestinal ulcers, cholinomimetic poisoning, gastrointestinal colic, renal and gallstone attacks, gastrointestinal X-ray examinations, and other conditions. Anticholinergics are not recommended for patients with glaucoma or for elderly patients in general. Poisoning with the plant or its preparations is accompanied by dry mouth, hoarseness, flushed skin, dryness and heat, thirst, dilated pupils, tachycardia, etc., and an elevated body temperature. First aid measures: physostigmine salicylate (from the anticholinesterase group) is administered at 0.001 g (in 5 ml of isotonic saline solution) every 5 minutes (total dose 0.006 g). Prostigmine or galantamine may also be prescribed. For psychomotor agitation, hexenal or sibazon are injected intramuscularly. For oral poisoning, gastric lavage is performed with water containing activated charcoal; saline rinses are recommended. Rinse your mouth, shower with cold water, or bathe in cold water, and dry yourself thoroughly.

Conclusions. Based on our research, we can conclude that belladonna herbal preparations, due to their atropine content, affect the peripheral nervous system through their M-anticholinergic action.