DEVELOPMENT OF COMPOSITION OF SEDATIVE ACTION TABLETS

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Introduction. Mental health problems of the population are increasingly a causes concern worldwide. Research conducted by the World Health Organization (WHO) in some countries shows that the neurotic disorders (neuroses) during the life carry much of the population, the vast majority of cases remain undiagnosed and untreated. Psychotropic drugs used for the treatment of neuropsychiatric disorders - antidepressants, anxiolytics and sedatives - often have to take a long time. Therefore, special importance attaches to their safety and tolerability. In search of effective and safe psychotropic drugs in the scientific world renewed interest to medicines of herbal origin.

The aim of the research. Development of scientific composition of sedative action tablets.

Materials and methods. The object of the study is tablets, dry extracts of Hops and Melissa, excipients: potato starch, MCC, sodium glycolate, aerosil, calcium stearate. The subject of the research is conducting physico-chemical and technological tests of API, tableting mass and tablets.

The following test methods were used in the work: organoleptic (appearance); physical and chemical (moisture content, geometric size of tablets); technological (optical microscopy, sieve analysis, fluidity, angle of natural slope; bulk density and density after shrinkage; resistance to crushing, compressibility, disintegration); mathematical (statistical processing of results).

Results and conclusions. In the course of this work was analyzed the current state of pharmacotherapy of nervous disorders, the nomenclature of drugs used for their treatment, and the justified topicality of creating a new medicinal product in form of tablet.

The physico-chemical and technological parameters of the active ingredient's dry extracts of Hops and Melissa were studied. Found that substance is highly hygroscopic with low flowability.

Studied the effect of auxiliary substances on the technological characteristics of the mass for tableting. It was determined that the best indicators of humidity, fluidity and compressibility possessed the composition which is moistened by 5% starch paste.

The quality parameters of the resulting tablet samples were defined. Our studies found that after wetting of 5% starch paste, have a sufficient crushing strength - 0.45 MPa, disintegration time 6 minutes, abradability meets the requirements of SPhU. On the basis of these studies, it can be concluded that the effective use as a humidifier of the tablet's weight - 5% starch paste.

Were studied profiles of release curves «in vitro» amounts of polyphenolic compounds from the tablets, is installed character of the influence of auxiliary substances, which contributed to the justification of the optimal composition.

The data obtained make it possible to develop the composition of a new medicinal product in the form of sedative tablets.