active pharmaceutical ingredient and can be used by children and adults. They can be prepared in chemists, and as required of legislation of Ukraine, components of medicine must be identification and quantity determined and medicine form must be stability.

Aim. To develop a spectrophotometric method of quantitative determination based on the physico-chemical properties of albendazole.

Materials and methods. UV spectrophotometer Evolution 60S (USA), analytical balances Axis (Poland), a standard sample of albendazole, pastilles with albendazole for chewing, dishes Class «A», reagents and solvents that meet the requirements of the State Pharmacopoeia of Ukraine (SPU).

Results and discussion. During developing of the spectrophotometric method for determination of albendazole in pastilles, the character of the spectrum of the alcohol solution was studied and it was found that the maximum of a 0.001% solution of the compound is observed at a wavelength of 296 nm. It was necessary to investigate the subordination of standard solutions of albendazole to the basic law of Bouguer-Lambert-Ber. Found that when used as a solvent ethanol (96%) R in 296 nm absorption peak observed linear relationship within albendazole concentrations from $2{,}0\cdot10^{-4}$ – $2{,}0\cdot10^{-3}$ %. The results of albendazole quantitative determination by the new spectrophotometric method corresponds to the parameters of linearity, specificity, accuracy, precision.

Conclusions. The described technique is worked out on experimental samples of a new dosage form, which consist of albendazole as an active compound exhibiting anthelmintic action.

IDENTIFICATION OF 6-GINGEROL IN DRY EXTRACT OF ZINGIBER OFFICINALE AND TABLETS ON ITS BASIS

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Introduction. Medicinal ginger (Zingiber officinale Roscoe) is a perennial herb of the ginger family (Zingiberaceae). It is cultivated in many tropical and subtropical countries, including Australia, Nigeria and Haiti, and China and India are the world's leading producers of ginger. In folk medicine, ginger is used to treat colds, rheumatism, sore throats, and digestive disorders such as dyspepsia, vomiting, gastritis, nausea, and diarrhea.

Recently, ginger has attracted attention due to its wide range of pharmacological activity, such as antitumor, antioxidant, anti-inflammatory, antidiabetic, cytotoxic and antiplatelet with low toxicity.

The main bioactive components of ginger are essential oils, and phenolic compounds such as gingerols and shogaols, which are responsible for the particular pungent taste of the plant. Preliminary pharmacological studies have allowed associating the hypoglycemic and antioxidant activity of ginger with the content of the phenolic compound 6-gingerol. This confirms the relevance and feasibility of its use for creation of drugs for the treatment of type 2 diabetes. Therefore, we have developed a solid dosage form containing, as an active pharmaceutical ingredient, a dry extract of medicinal ginger.

Aim of the work: to study dry ginger extract and tablets based by thin layer chromatography (TLC) to determine the possibility of 6-gingerol identification in their composition and subsequent introduction of these methods in the regulatory documentation.

Materials and methods. The studies were performed using the TLC method in an ascending manner on plates coated with a layer of silica gel (manufactured by Sorbfil).

Test solution: About 0.1 g of dry ginger extract (manufactured by Medagroprom, Dnipro) was placed in a 50 ml volumetric flask and 30 ml of 40% ethanol was added. Dissolved when heated and stirred in a water bath, cooled and brought to the mark with the same solvent and mixed thoroughly.

Test solution of tablets with dry ginger extract: About 0.1655 g of the mass of the crushed tablet placed in a 50 ml volumetric flask, 30 ml of 40% ethanol was added and dissolved when heated in a water bath. After further cooling, the solution was brought to the mark, stirred and settled. The supernatant was used for further studies.

Comparison solution: 100 mg of standard sample of 6- gingerol 98% min by HPLC (manufacturer "Aktin chemicals, Inc.", China) was taken, placed in a 50 ml volumetric flask, and the solution was brought to a mark with 96% ethanol at constant stirring. Next, 1 ml of the initial solution of gingerol was placed in a 25 ml volumetric flask, brought to 40% ethanol, and stirred.

Preparation of the plate: On the start line of the chromatographic plate coated with a layer of silica gel (manufactured by the company "Sorbfil") applied with lines of 10 mm solutions: a standard sample of 6-gingerol 10 μl, the test solution of dry ginger extract 50 μl, the test solution of tablets with ginger extract 50 μl. The plates were air-dried and placed in a chromatographic chamber, pre-saturated with the mobile phase, n-butanol - water - glacial acetic acid (90: 9: 20). After the solvent front passed 15 cm, the plate was removed from the chamber and dried under warm air to remove the solvent odor. The chromatographic plate was then sprayed with a solution of 2.5 ml of sulfuric acid P and 25 mg of vanillin P in 50 ml of 96% ethanol. After keeping in air until evaporation of the alcohol, the plate was heated in an oven at 105 ° C for 5 minutes and viewed in visible light.

Results and discussion. On the chromatogram of 6-gingerol standard solution one area of dirty purple with RF = 0,77 was observed. On the chromatograms of the studied solutions of the ginger extract and tablets observed three zones: the upper zone in location and color corresponds to the spot on the chromatographic plate of standard 6-gingerol solution, below there are areas of gray-green (RF = 0,64) and spots of cherry color on the start line.

Conclusions. Studies have been performed to identify 6-gingerol in the dry extract of ginger and tablets based on it by thin layer chromatography.

The developed techniques for chromatographic determination of 6-gingerol can be used in the development of quality control methods for both dry ginger extract and tablets based on it.

INTERACTION OF CITRATE AND CALCIUM

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Introduction. To maintain the structure of the teeth of bones and nails, the body is calcium-rich. However, calcium intake into the body also leads to its elimination. To a greater extent, this is due to excessive intake of salt and salt mites, a large amount of meat, constant coffee consumption, etc.

Loss of calcium with age can lead to osteoporosis. Osteoplasm is a metabolic disease of the skeleton with a decrease in bone mass and a violation of the microstructure of the bone tissue. One of the causes of osteoporosis is the loss of calcium from the bones. Replenishment of calcium reserves is possible when eating eggshell.The calcium it contains in the form of calcium carbonate which is poorly soluble.When ingested in the stomach calcium carbonate reacts with hydrochloric acid and calcium chloride is obtained which is already soluble in water and absorbed by the body. Accordingly, the acidity of the stomach will regulate the amount of calcium absorbed by the body. If the acidity of the stomach is reduced, then calcium carbonate can not completely turn into chloride. But calcium citrate is perfectly absorbed with any acidity of the stomach and has greater biological activity compared to chloride.

Aim. To determine the calcium content in the egg shell without maceration with lemon juice. On the pharmaceutical market, there are many medicines used to prevent and treat osteoporosis, while most of the most are combined because the absorption of calcium in the human body comes with a vitamin