

## PHARMACEUTICAL DEVELOPMENT OF MEDICINE FOR UROLITHIASIS TREATMENT

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**Introduction.** Urolithic disease (nephrolithiasis or urolithiasis) is a common disease among urological diseases. This disease is characterized by the formation of stones in the urinary tract and kidneys. In most cases, the cause of urolithiasis is a small congenital metabolic disorder, through which appear insoluble salts, which then form a stone. Depending on the composition the stones are divided into several types: phosphates, urates, oxalates and so on. Treatment of patients about kidney and ureter stones can be conservative, instrumental and surgical. Conservative treatment is used in patients with crystalluria, and in the presence of calculus of small size that can depart by themselves. The main group of drugs for conservative treatment of urolithiasis make up phytopreparations. We have processed data of scientific literature on the use of medicinal plants in kidney diseases and proposed to use for the development of drug thick Rubia Tinctorum root extract and cornflower flowers.

**Aim of the study.** The aim of the research was the elaboration of tablets containing thick extract of Rubia Tinctorum and cornflowers.

**Materials and methods.** Thick Rubia Tinctorum and cornflower extracts were obtained at the Department of Industrial Pharmacy of the National University of Pharmacy. The composition of model samples differed by content in tablets of dry adhesives (microcrystalline cellulose, gum) and the humidifier (Plasdone K 25, Benecel). Tablets obtained using wet granulation. Made pharmaco-technological research of mass for tableting (granulate) such as fractional composition, fluidity, bulk volume and the ability to shrink, angle of repose. Calculated Hausner and Corr coefficients.

**Results.** All model samples met the requirements of the test disintegration according to the State Pharmacopoeia of Ukraine and requirements for mechanical resistance (friability and resistance to crushing). Tablets disintegration time was 15 minutes. Friability – 0.3%.

**Conclusions.** As a result of experimental research has been substantiated composition of tablets codenamed "Nephrolith".