COMPARATIVE CHARACTERISTIC OF QUANTIFICATION METHODS FOR PYRAZINAMIDE IN TABLETS USING SPECTROPHOTOMETRY

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As it is known, tuberculosis represents a chronic infectious disease, which remains the most large-scale problem not only from medical, but also from social viewpoint for the present day, too. Annually, owing to tuberculosis about 3 million people dies all over the world and approximately 8 million events of first registered tuberculosis are observed every year. That is why constant research, which is aimed on improvement of the known methods of analysis for antituberculosis compounds either in pure condition or in medicinal formulations, is still a current task of pharmaceutical and medical care. So, medicinal preparations are divided into basic remedies (isoniazid, rifampicin, pyrazinamide and ethambutol) and reserve remedies (cycloserine, kanamycin, ethionamide, etc.). For our researches, we have chosen substance from the basic remedies – pyrazinamide.

The aim of our research is to carry out quantitative estimation of pyrazinamide contents in tablets of various trademarks using various techniques for quantitative determination by UV-spectrophotometry method; and on the base of the data obtained to make conclusion about quality of medications and possibilities of the tested techniques in quantification of substance.

Researches were carried out on spectrophotometer "Evolution 60S"; into quantification were put calculations by the method of standards, calculations by the graph and calculations using specific absorbance. For investigations were taken tablets of pyrazinamide 0.5 of two Ukrainian trademarks –"Borshchahivskiy chemical pharmaceutical plant" and Darnitsa.

As it has been stated in the result of our researches, the most preferable technique for quantification of pyrazinamide in the composition of tablets by UV-spectrophotometry is the method of standards; both trademarks' remedies are of appropriate pharmacopoeial quality.