Novel potential biologically active of sulfur-containing vicinal amino alcohols: Synthesis and activity

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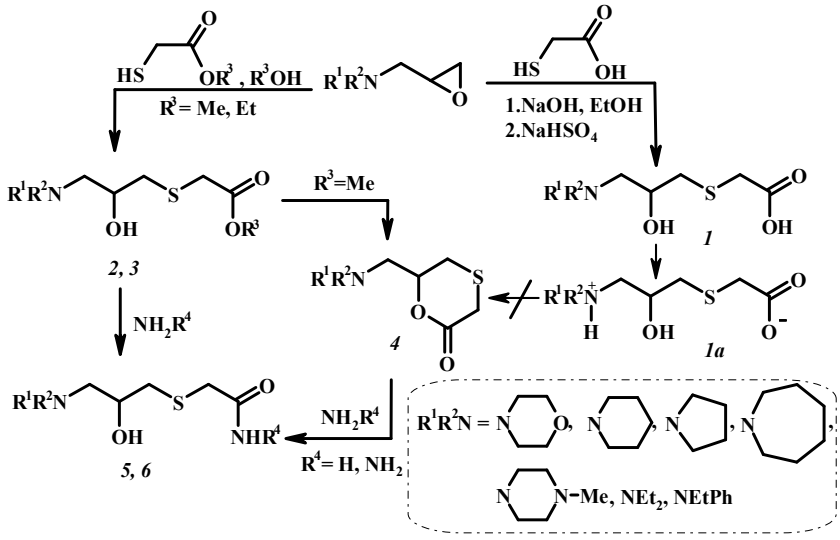
The synthesis of potential biological activity new derivatives vicinal amino alcohols, which will include inside formula groups of sulfide, acid, amides, opening or cycling esters or hidrazides, in order to obtain a biological active systems, acting for system of circulation of the blood. In the past decade increased illness system circulation: an increase in blood pressure, coronary heart disease, cerebrovascular disease, etc. We assume that inserting analogous groups in the systems of amino alcohols will bring the reduction of different influence, assimilation by organism and formation of positive properties [1].



So called anchimeric properties of nitrogen have been observed during investigation of reactions. Based on the ^{1}H and ^{13}C NMR data it can be said that the oxirane ring opens only in accordance with Krasuski rule, i.e. not dependent on the structure of the nucleophile and conditions of the deviations from the rules is not observed [2,3].

Studies of biological activity of some synthesized compounds showed that the synthesized acids, amides and hydrazides do not show antibacterial activity against strains of Candi., E. Coli M17, Sal., B. Sub., B. Mest., St. Aur. 209, St. Aur. 5233, Tpy., Asp. and also do not stimulate their growth. In vitro and in vivo investigations of some compounds by specific pharmacological methods have been performed using Wistar laboratory rats. It have been shown that some compounds slow the heart rate, exhibit antihypoxic, adrenomimetic or prolonged, however dimly marked adrenolytic action.

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