



**11<sup>th</sup>** International Symposium on the  
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## OP-44 STUDY OF ALKALOIDS OF VINCAMINE FRACTION OF *VINCA ERECTA*

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### INTRODUCTION

Development of new drugs from locally available raw materials is a priority. In this respect *Vinca erecta* is a natural reserve of considerable importance that can fully cover the country's pharmaceutical industry needs for such drugs.

The alkaloid vincamine (oxybral) isolated from the aerial part of *V. erecta* has uterotonic properties with myotropic type of action.

Vincamine hydrochloride is used in medicine as an active stimulator of childbirth in different types of uterine weakness and in uterine atony in postnatal period. It also has vasodilating, hypotensive and sedative action. The drug acts predominantly on the brain blood vessels reducing the resistance and thereby improving blood flow in the brain tissue. It is used mainly in the cerebral form of hypertension, including hypertensive crisis.

### MATERIALS AND METHODS

Aerial part of *Vinca erecta* contain up to 4% of indole alkaloids.

### RESULTS AND DISCUSSION

Fractionation of total alkaloids using buffer solution with PH = 2.8 provided weak and strong bases. Kopsinine, pseudokopsinine and vindolinine (14.15-dehydropseudokopsinine) were isolated from the strong bases fraction by conventional way. Kopsinine dihydrochloride is approved for use in medical practice.

The sum of weak bases according HPLC-mass spectrometry (Agilent Triple QQQ) provided vincine, vincamine, apovincamine, (±) eburnamine and (+) eburnomanine.

Preliminary pharmacological studies have shown that the amount of weak bases – fraction of vincamine can replace the imported products Oxybral, cavinton and vinkapan.

### REFERENCES

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