TOP-CONFERENCES

International Congress on
Biological, Physical And Chemical Studies

International Congress on Biological, Physical And Chemical Studies - is an international conference platform under open open-access policy. The conference is led by international expert members who take an abjective approach to peer review, ensuring each research paper is reviewed, edited by authors and evaluated on its own scholarly merits and research integration. Publishing and joining on the procedding of the International Congress on Biological, Physical And Chemical Studies will exsure publishing experience and indexing possibilities on various global indexing.

Study of the Antitumor Activity of Colchipritis-Neo on Sarcoma 180 and Sarcoma Tumors 45

Enikeeva Z. M., Urazov N. E., Ibragimov Sh. N., Agzamova N. A.
The republican specialized scientifically-practical medical centre
of Oncology and Radiology of MH RUz, Republic Uzbekistan,
Tashkent - 700174, Street Faroby 383

Based on the results of screening conducted on the panel of human tumors in NCI USA, the substance K-20, called colchipritis, was highly active on all tumor lines. With the intraperitoneal method of administration, its LD50 is 54 mg/kg for mice and the doses in which the drug was used to study its activity were from 3 to 5 mg/kg. When administered orally to mice, the LD50 was reduced to 1820 mg/kg, i.e., 35.7 times, and the therapeutic doses were 100 and 200 mg/kg. The LD50 of the drug for rats was 1217 mg/kg (97 times lower than that for intraperitoneal K-20), and the therapeutic doses were 60 and 30 mg/kg, but a more pronounced effect of the drug was obtained with lower doses in both mice and rats.

The aim of the present study was to evaluate the antitumor effect of oral K-20 (called colchiprit-neo) on transplantable tumors of mice and rats in comparison with that of intraperitoneal administration**.**

Materials and methods: The study was performed in mongrel mice and rats with transplanted tumors Sarcoma 180 and Sarcoma 45. K-20 were administered to mice and rats on day 4 after tumor transplantation 10-fold orally and IV. The results were evaluated according to standard criteria: tumor growth inhibition (TPO), body weight and spleen of animals, white blood cell count. Differences at $p < 0.05$ were considered significant

Results. In mice with Sarcoma 180, colchipritol administered orally at a dose of 100 mg/kg was more effective (86/82%) than intraperitoneally administered at a dose of 3 mg/kg (41/45%), exposure to the substance in both doses contributed to a significant increase in body weight by the end of the experiment. However, colchipritis at a dose of 3 mg/kg sharply reduced spleen weight (by -48.25% compared to the control, and at a dose of 100 mg/kg - by 8.8%) and reduced blood-drilling levels.

In rats on Sarcoma tumor 45, K-20 activity at 2 mg/kg was 70/70% and at 30 mg/kg was 90/90% orally, and colchiprita-neo showed fewer side effects, such as a reduction in spleen weight, which was reduced by only 3%, and blood-drilling rates

Thus, oral administration of colchipritol gives both a more pronounced antitumor effect and a decrease in side effects