

Evaluation of anticancer effects of Avelos' latex (*Euphorbia tirucalli*), across the tumor clones detection test (warts) in *Drosophila melanogaster*

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This lecture will address the advances and perspectives of cancer therapy. Avelos (*Euphorbia tirucalli*) is an original African plant used all over the world in popular medicine as cancer, ulcer and inflammation treatment. It's considered toxic because its latex is corrosive in contact with skin. This shows the intoxication's risks of its common use. Some researches show that Avelos could worsen the patient status and can have carcinogenic effects. To evaluate the practice of Avelos, epithelial tumor clones detection test in *Drosophila melanogaster* was used. The larvae of *Drosophila melanogaster* *wt*+/+ *mwh* were treated with the chemotherapy mitomycin C (0,1mM), which is known as tumor inductor. The larvae were later exposed with Avelos aqueous extract (0,33; 0,5 e 1µL/mL) to estimate if the substance reduced the previously induced tumors. The Avelos didn't cause tumor frequencies increase, what makes the management of this herbal medicine safe. However, in association with mitomycin C were verified statistically significant reductions in these chemotherapy-induced tumors. Avelos aqueous extract showed indications of dose response in combination with mitomycin C. Therefore, in the experimental conditions of this study Avelos' latex was able to reduce tumor justifying the widespread use of Avelos in popular medicine. In addition, this lecture will discuss the possibility of using Avelos as chemotherapy in cancer guidelines and the advantages and disadvantages of its usage. The attendees of this lecture will be updated about oncology research in Brazil and how this country can contribute to cancer genetics therapy.

Biography

Elcio Moreira Alves is a medical student since 2010 at University Center of Patos de Minas and since the beginning has demonstrated interest for research. In 2011 he began to study Avelos as a probable cure for cancer and he has been recognized at I COMED for this research, winning first place within oral communication. His mentor, Prof. Dr. Júlio Cesar Nepomuceno, oncogenetic doctor by University of Brasília - UnB has experience in genetics, focusing on mutagenesis and carcinogenesis, with over 25 articles published in several indexed journals internationally. He is responsible for more than 15 master's and doctoral degree orientations.

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