Emergency Treatment of Methanol Poisoning: A Mathematical Approach

Authors: Priyanka Ghosh, Priti Kumar Roy

Abstract : Every year a considerable number of people die due to methyl alcohol poisoning, in which most of them die even before proper treatment. This work gives a simple and cheap first aid to those affected individuals by the administration of activated charcoal. In this article, we emphasise on the adsorption capability of activated charcoal for the treatment of poisoning and use an impulsive differential equation to study the effect of activated charcoal during adsorption. We also investigate the effects of various parameters on the adsorption which are incorporated in the model system.

Keywords: activated charcoal, adsorption, impulsive differential equation, methanol poisoning

Conference Title: ICMB 2018: International Conference on Mathematical Biology

Conference Location: Berlin, Germany Conference Dates: May 21-22, 2018