

Recent developments in the use of activated charcoal in medicine

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ABSTRACT

One of the raw forms of graphite is activated charcoal which has an extensive surface area allowing for the adsorption of a wide range of chemicals. It possesses the strongest physical adsorption forces of the available materials, as well as the largest volume of adsorbing porosity. Activated charcoal acts as an adsorbent, collecting and storing substances in the gastrointestinal tract, reducing or blocking absorption in the bloodstream. The ingested toxins interact with charcoal by recycling toxins in the intestinal cavity. In cases where the drug has not been absorbed from the abdominal system, it is recirculated through the liver and intestines or by means of passive diffusion or active secretion. The article aims to review the most recent advances in the use of the activated charcoal, including the dose, how charcoal acts in the body, the mechanism of action, administration, contraindications, as well as the impact of various factors on the adsorption process. In addition, we also discussed numerous medical applications of activated charcoal.