

Should Activated Charcoal Powder can be Considered as an Over-The-Counter Medication for Acute Poisoning Cases?

Dear Sir,

Over-the-counter (OTC) medications are some drugs that are safe and effective for the general public. For many years, syrup of ipecac was used as an OTC medication for patients who were poisoned with oral toxins. However, in 2003, due to the adverse effects, unproven benefits, and abuse potential, the American Academy of Pediatrics recommended that syrup of ipecac should no longer be used as an OTC medication at home.^[1]

We know that in oral poisoning management, decontamination is a critical step in pre-hospital situations when the victim is found. Therefore, we may suggest that charcoal powder might be beneficial as an OTC medication.

Charcoal powder can be used easily. When it combines with water, it becomes activated. Activated charcoal (AC) provides an appropriate area allowing it to bind to toxins in the gastrointestinal tract and preventing systemic absorption.^[2]

There is a systematic review study on the efficiency of AC, its appropriate administration, and the number of times it should be taken for the type of toxins and drugs ingested.^[3,4] Although the variety of studies had some limitations, they demonstrated that AC significantly reduces drug and toxin absorption which can be more effective if taken during the first hour of oral poisoning.^[3-5] It can be administered for all oral toxins and drugs, except corrosive substances, alcohols, metals, and petroleum products.^[2] Also, the adverse effects of AC are not serious and are mainly limited to nausea, vomiting, diarrhea, and abdominal pain.^[3]

As the best time of AC administration is during the first hour of poisoning, it is therefore more effective to use it at an appropriate time by the general public when the victim is found. Considering the limited contraindications and adverse effects of AC, the usage of charcoal powder by the general public is more beneficial than when it is not. Now is the time to reconsider charcoal powder as an OTC medication and its usage at home, nursing homes, chemical laboratories, kindergartens, offices, and any necessary places, especially in societies where pre-hospital emergency services may not be easily available. Certainly, the contraindications such as an unprotected airway or high aspiration risk, gastrointestinal pathology, and recent gastrointestinal surgery due to the risk of hemorrhage or perforation should be considered for AC administration.^[4,6]

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Conflicts of interest

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