

## FRANCE international scientific-online conference: "SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM"

PART 14, 5<sup>th</sup> APRIL

#### ACTIVATED CHARCOAL

### To'xtayeva Muborak Berdimurodova Ma'mura

Teachers of the Technical College of Public Health named after Abu Ali ibn Sino

Various sorbents have been widely used for treatment purposes since ancient times. Taking coal powder has given good results in the treatment of serious infectious diseases such as poisoning by salts of heavy metals, food poisoning, dysentery, cholera, diarrhoea.

In addition, coal is useful in the treatment of chronic gastritis, protracted colitis, high acidity of gastric juice, severe forms of diarrhea (diarrhea). It was first synthesized in 1915 by Nikolay Dmitrievich Zelinsky and used as a universal chemical defense agent in anti-fog gases, and later as a heterogeneous catalyst.

### **PHARMACOLOGY**

Activated charcoal has an enterosorbent, detoxifying and antidiarrheal effect.

Belongs to the group of polyvalent physicochemical antidotes, has high surface activity, adsorbs poisons and toxins in the gastrointestinal tract before their absorption. It is active as a sorbent in hemoperfusion.

Weakly adsorbs alkalis and acids, as well as iron salts, cyanides, malathion, methanol, ethylene glycol. Does not affect mucous membranes. In the treatment of intoxications, it is necessary to ensure an excess of coal in the stomach (before washing it) and in the intestines (after washing the stomach). A decrease in the concentration of coal in the environment causes the desorption of the bound substance and its absorption.

When there are food masses in the gastrointestinal tract, the drug needs to be administered in large doses, because the contents of the gastrointestinal tract are absorbed by charcoal and the activity of charcoal decreases. If poisoning is caused by substances involved in enterohepatic circulation (cardiac glycosides, indomethacin, morphine and other opiates), charcoal should be used for several days.

It is especially effective as a sorbent in hemoperfusion in cases of acute poisoning with barbiturate, glutamide, theophylline. It reduces the effectiveness of other drugs and drugs that affect the mucous membrane of the gastrointestinal tract taken at the same time.

### *INSTRUCTIONS*

The drug is prescribed in the following instructions:

Detoxification with high acidity of gastric juice in endo- and exo-intoxications: dyspepsia, flatulence, putrefaction, fermentation processes, mucus, HCl, hypersecretion of gastric juice, diarrhea;

Alkaloids, glycosides, heavy metal salts, food poisoning;

Food poisoning, diburn disease in the stages of zenteria, salmonellosis, toxemia and septicotoxemia;

# FRANCE international scientific-online conference: "SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM"

### PART 14, 5<sup>th</sup> APRIL

Kidney failure, chronic hepatitis, acute viral hepatitis, liver cirrhosis, atopic dermatitis, bronchial asthma, gastritis, chronic cholecystitis, enterocolitis, cholecystopancreatitis;

Poisoning with chemical compounds and drugs (including organophosphorus and organochlorine compounds, psychoactive drugs), allergic diseases, metabolic disorders, alcohol abstinence syndrome;

in intoxications against the background of radiation and chemotherapy in cancer patients;

In preparation for X-ray and endoscopic examinations (to reduce the amount of gas in the intestines).

### SIDE EFFECTS

Among the side effects of the drug are dyspepsia, constipation or diarrhea, with long-term use - hypovitaminosis, reduction of absorption of nutrients (fats, proteins), hormones in the gastrointestinal tract. Through activated charcoal in hemoperfusion - thromboembolism, hemorrhages, hypoglycemia, hypocalcemia, hypothermia, lowering of arterial pressure.

### **INSTRUCTIONS FOR USE**

You should not take any other drugs with activated charcoal, as they will inevitably be absorbed and at the same time reduce the ability of the charcoal to absorb toxic substances. The use of activated carbon as a sorbent is most effective in the first 12 hours after poisoning. At the same time, coal itself is not absorbed and is not metabolized in the gastrointestinal tract; it is excreted in the feces and dyes it black.

Activated charcoal can also be taken for flatulence (stomach rest), dyspepsia, colitis, hyperacidity of gastric juice, diarrhea, food poisoning - 1-2 grams 2-4 times a day, 1.5-2 hours after meals then it should be taken with drinking water (it is better to take the tablets crushed).

However, this drug is not intended for long-term, continuous use. It is used as an emergency treatment and is usually taken for several days. In fact, activated charcoal binds to itself many substances (enzymes, vitamins, amino acids, etc.) that are not only toxic, but also useful for the body in the gastrointestinal tract. In addition, studies have shown that continuous use of this drug can lead to unwanted toxic effects (nausea, vomiting and other unpleasant complications).

#### **REFERENCES:**

- 1. M.F.Ziyayeva. Z.O.Rizayeva. "Bolalarda hamshiralik parvarishi". Toshkent, "Fan va texnologiya" 2012 yil.
- 2. X.N Fayziyev. « Сестринский уход за детьми » Toshkent, «Ilm ziyo» nashriyoti, 2008 yil
  - 3. K.S Inomov. «Pediatriyada hamshiralik ishi» Toshkent, 2007 yil
  - 4. www.ziyonet.uz



# FRANCE international scientific-online conference: "SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM"

PART 14, 5<sup>th</sup> APRIL

5. <a href="https://mymedic.uz/">https://mymedic.uz/</a>