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UNDERSTANDING DANGEROUS SIDE EFFECTS OF THE ANTIBIOTICS

Admission: Antibiotics are powerful medicines that fight certain infections and can save lives when used properly. They either stop bacteria from reproducing or destroy them. Before bacteria can multiply and cause symptoms the immune system can typically kill them. White blood cells (WBCs) attack harmful bacteria and even if symptoms do occur, the immune system can usually cope and fight off them. Sometimes, however the number of harmful bacteria is excessive, and the immune system cannot fight them all. Antibiotics are useful in this scenario.

Aim of the study: to learn and analyze the harmful effects of the antibiotics and give advices of its smart use.

The research methods and material: Modern antibiotics are a good example. The scientific literature and internet references in Ukraine and Britain relevant to a particular problem were examined.

The first antibiotic was penicillin. Penicillin-based antibiotics, such as ampicillin, amoxicillin, and penicillin G, are still available to treat a variety of infections and have been around for a long time.

Some medical professionals have concerns that people are overusing antibiotics. They also believe that this overuse contributes toward the growing number of bacterial infections that are becoming resistant to antibacterial medications.

According to the Centers for Disease Control (CDC), outpatient antibiotic overuse is a particular problem. Like any other medication, antibiotics can have a detrimental effect on a human body.

There are such types of harmful antibiotic action as side effects, allergic reaction and resistance.

The most common side effects of antibiotics affect the digestive system. These occur in around 1 in 10 people. Side effects of antibiotics that affect the digestive system include: vomiting, nausea (feeling like you may vomit), abdominal pain, bloating and indigestion, lost of appetite. These side effects are usually mild and should pass once you finish your course of treatment.

Around 1 in 15 people have an allergic reaction to antibiotics, especially penicillin and cephalosporins. In most cases, the allergic reaction is mild to moderate and can take the form of: a raised, itchy skin rash, coughing, wheezing and tightness of the throat, which can cause breathing difficulties. These mild to moderate allergic reactions can usually be successfully treated by taking antihistamines. In rare cases, an antibiotic can cause a severe and potentially life-threatening allergic reaction known as anaphylaxis. The main symptoms of this condition are: a rapid heartbeat, increasing difficulty breathing caused by swelling and tightening of the neck, a

sudden intense feeling of apprehension and fear, sharp and sudden drop in your blood pressure, which can make you feel light-headed and confused.

Other problem is antibiotic resistance. Both the NHS and health organizations across the world are trying to reduce the use of antibiotics, especially for conditions that aren't serious.

The overuse of antibiotics in recent years means they're becoming less effective and has led to the emergence of "superbugs". These are strains of bacteria that have developed resistance to many different types of antibiotics, including: methicillin-resistant *Staphylococcus aureus* (MRSA), *Clostridium difficile* (Cl. Difficile), the bacteria that cause multi- drug- resistant tuberculosis (MDR- TB) and carbapenemase- producing Enterobacteriaceae (CPE). These types of infections can be serious and challenging to treat, and are becoming an increasing cause of disability and death across the world.

Using knowledge of the side effects of antibacterials, I can give following tips about their use:

1. Follow the course of antibiotics.
2. Do not increase or decrease antibiotics' dose of yourself.
3. If side effects occur taking antibiotics seek medical advice immediately.

Conclusions: So, harmful effect of antibiotics is great problem of modern medicine and pharmacy. When it comes to antibiotics, take your doctor's advice on whether you need them or not.

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