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Food Poisoning: Mini-review

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Review Article

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ABSTRACT

Food poisoning, also called foodborne illness, this is caused by consuming contaminated food. The common reasons for food poisoning are microorganisms like bacteria, viruses, parasites and toxins produced by these infectious organisms.

INTRODUCTION

Changes in normal body functions due to swallowing, inhaling, touching or injecting various drugs, chemicals, venoms or gases is called as poisoning and the substances are called as poisons. Many drugs are acted like poisonous in higher concentrations or dosages [1-10].

Food-borne infections are common globally. Among the factors responsible for this burden are centralization and globalizations of food supply, increasing microbial resistances to antibiotic and growth of immunosuppressed subpopulations [11-15].

TYPES of POISONING

The list of types of Poisoning includes:

- Food Poisoning,
- Alcohol poisoning,
- Drug poisoning,
- Carbon Monoxide poisoning,
- Heavy metal poisoning,
- Chemical poisoning [15-20].

Alcohol poisoning

Alcohol poisoning occurs when a person drinks a poisonous amount of alcohol, in a short period of time [21-30]. Alcohol poisoning can slow down the brain functions. Irritate the stomach which causes vomiting. Affect the nerves that control your breathing and heartbeat, stopping both. Dehydrate the body, which leads to brain damage [31-40].

Drug Poisoning

An overdose occurs when a toxic (dangerous) amount of a drug or medicine is taken. Substances that can cause harm when too much is taken include alcohol, prescription and over-the-counter medications, illegal drugs and some herbal remedies. An overdose is a medical emergency that requires immediate medical attention [41-45].

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Carbon Monoxide Poisoning

After carbon monoxide (CO) is breathed in, it directly enters the bloodstream and mixes with hemoglobin, to form carboxyhaemoglobin. When this happens, the blood is no longer able to carry oxygen, and this lack of oxygen causes the body's cells and tissue to fail and die [46-50].

Heavy Metal Poisoning

The heavy metals most commonly associated with poisoning of humans are lead, mercury, arsenic and cadmium. Heavy metal poisoning may occur as a result of industrial exposure, air or water pollution, foods, medicines, improperly coated food containers, or the ingestion of lead-based paints [51-60].

FOOD POISONING

Food Poisoning mainly caused by consuming unhealthy/contaminated food. Mostly food that has not been cooked properly will contain bacteria like *E. coli* and *Salmonella*, which are mainly found in meat.

Food poisoning may affect the person immediately or it may take some time (one or two days) to show the effect [61-68].

Common Foods Associated with Food Poisoning

- Eggs
- Poultry
- Meats
- Unpasteurized milk or other fluids
- Cheese
- Raw fruits and vegetables (usually unwashed
- Nuts
- Spices

Food Poisoning Symptoms

The main symptoms which can be notice in the case of food poisoning are: Extreme illness, Dizziness, Vomiting, Stomachache, Diarrhea, Headache or fever, Feeling faint.

Symptoms for life-threatening food poisoning condition:

Diarrhea persists for more than 3days. Fever more than 100°F for more than 2 days. Severe illness (Patient find difficulty while speak) [69-70].

Diagnosis

There are steps to diagnose the food poisoning.

- Physical Examination
- Blood test
- Stool examination
- Rectal examination
- Scanning [71-76].

Treatments

Food Poisoning treatment will depends on the source of illness. Generally this can be treated at home, without consulting the medical officer/Doctor. The main treatment of food poisoning is avoiding dehydration by fluids in take like water, rehydration salt solutions etc. [77-80].It can also treated by taking antibiotics and anti-emetics to stop vomiting.

Preventing the Spread of Food Poisoning to Others

Some infections causing diarrhoea and sickness (vomiting) are very easily passed on from person to person. If you have diarrhoea, the following are also recommended to prevent the spread of infection to others [81-87]:

- Wash hands thoroughly after going to the toilet. Use liquid soap in warm running water.

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- Don't share towels.
- Don't prepare or serve food for others.
- Regularly clean the toilets that you use. Wipe the flush handle, toilet seat, bathroom taps, surfaces and door handles with hot water and detergent at least once a day. Keep a cloth just for cleaning the toilet (or use a disposable one each time).
- If the cause of food poisoning is known to be (or suspected to be) a germ called cryptosporidium, patient should not swim in swimming pools for two weeks after the last episode of diarrhoea [88-93].

DISCUSSION and CONCLUSION

Food poisoning is life-threatening for children, adult, pregnant women and older. These individuals should take extra precautions by avoiding the outside foods and taking care about food habits. To avoid Food Poisoning extra precautions should take by avoiding raw meat, undercooked food, avoid unhealthy and contaminated food items, Unpasteurized juices etc.

To prevent food poisoning at home: Washing hands with warm water and hand wash before cooking and eating food. Cooking food at safe temperature and avoid consuming raw food and refrigerated food intake [94-100].

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