Screening of drugs in urine

Practical Clinical Toxicology

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Introduction

- Drug testing is commonly employed to check for the presence of any drug(s)

Urine as screening sample

- Most widely used specimen for drugs of abuse testing because of the advantages of large volume

Advantages and disadvantages

- Disadvantages

Susceptible to adulteration or substitution.

Performance characteristics

Sensitivity: refers to the lowest detectable concentration of the drug.

What does a routine test include

- There are about 11 categories of substances of abuse

Variables affecting the results of urine testing

Cuttof selection (any sample having drug concentration equal or above specified level is considered positive results.

Variables affecting the results of urine testing

Pharmacokinetic

introduction

- Forborne illnesses (food poisoning) results from consumption of food contains pathogens such as bacteria, viruses, parasites or food contaminated by poisonous chemicals or bio toxins.

- High risk groups include infants and children, elderly and immunocompromised patients.

Predisposing risk factors

- Risk factors related to both host and environment:

- Causative agents: most of food borne illnesses are caused by bacteria, parasites or viral pathogens , most commonly implicated viruses are hepatitis A and E , rotaviruse.

Strategies for control of food borne illness

- Hygiene measures should be adapted during food production.

References

1- Gossel TA, Bricker TD, (Eds.); Principles of Clinical Toxicology; latest edition.

2- Viccellio P, (Ed.); Handbook of Medicinal Toxicology; latest edition.

3- journals of pharmacology and toxicology