

## Urinary Antiseptic

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## Urinary antiseptics

- are the antimicrobial drugs that are excreted mainly in the urine and perform its antiseptic action in bladder.
- are concentrated in the kidney tubules which are mainly useful in lower urinary tract only.
- no action on body system.
- may be given before examination or surgery on the urinary tract or to treat UTI.

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## Nitrofurantoin

- Used for the treatment of uncomplicated UTI and prophylaxis against UTIs in people prone to recurrent UTIs.
- Increasing bacterial antibiotic resistance to other commonly used agents, such as fluoroquinolones and trimethoprim/sulfamethoxazole has led to increased use of it.
- Nitrofurantoin is concentrated in the urine
- MOA: damage Bacterial DNA.

Nitrofurantoin-- highly reactive intermediate-- damage DNA.

A/E:

- Common: nausea, headache, and flatulence
- Others: diarrhea, dyspepsia, abdominal pain, constipation, dizziness, drowsiness, acute pulmonary hypersensitivity reaction, [pruritus](#), urticaria, fever, chills, malaise
- Rare but serious: pulmonary reactions, hepatotoxicity, and neuropathy.

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## Nalidixic acid

- Nalidixic acid is effective primarily against gram negative bacteria, with minor anti gram positive activity.
- In lower concentrations, it acts as bacteriostatic while in higher concentration, it is bactericidal.
- Used for treating UTI.
- MOA: inhibit DNA gyrase and topoisomerase IV.
- A/E:
- Common: rash, itchy skin, blurred or double vision, changes in color vision, nausea, vomiting, and diarrhea.
- May cause convulsion and hyperglycemia, photosensitivity reactions and sometimes haemolytic anemia, thrombocytopenia or leukopenia.

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