

Antineoplastic drugs - designed to treat malignancies, now also used to treat diseases with inflammatory component

Tx of malignancies

- pharmacotherapy (chemotherapy)
  - sensitivity of CA to chemotherapy (see box 23-1, pg 255)
  - pharmacologic agents (see box 23-2, pg 258)
- radiation
- surgery

Antineoplastic drugs

General Principles

- **Antineoplastic drugs don't discriminate between neoplasm cells and host cells**
- sensitivity of neoplasms to chemotherapy
- treat initial stages of disease very aggressively
- treatment is "pulsed"

Mechanism of Action

- interfere with cell reproduction
  - cell cycle specific
  - cell cycle non-specific
- interfere with cell metabolism

ADR's

- bone marrow suppression
- GI effects
- dermatologic (skin - hair follicles) effects
- hepatotoxicity
- neurologic effects
- nephrotoxicity
- immunosuppression
- germ cell inhibition

**Oral Effects**

- mucositis
- sensitive teeth and gingival
- hemorrhage, petechia
- xerostomia
- altered taste (dysgusia)
- infection (acute and chronic)
- bisphosphonate-related osteonecrosis of the jaw (BRONJ)

## Management of CA chemotherapy patients

1. Before Chemotherapy
  - maximize/optimize oral hygiene **before** chemotherapy
2. During chemotherapy
  - timing of appt is important to coincide with highest level of blood elements (red & white cells)
  - MD consult
  - pre-med if indwelling catheter
  - emphasize OHI and home care
3. After chemotherapy
  - resume regular dental treatment