

Infection Control Implications in the Elderly



The Aging Population

- By the Year 2000 the population between 65-85 years will increase by 15% - 20 %.
- Patients over 70 years have a five fold greater risk of acquiring a HAI than other patients.
- Estimated that 40% of the elderly will be accommodated in elderly homes.

Risk Factors for Infections

- Immune deficiency of aging.
- Systemic diseases associated with aging
- Age related changes in nutrition.
- Hospitalization
- Age related changes in :
 - Oral Hygiene
 - Gastric Acid
 - Skin Integrity
 - Genitourinary tract
 - Pulmonary Function

Clinical Features of Infection in the Elderly

- Fever can be absent in up to 30% of elderly patients with an infection.
- Confusion, Lethargy, Tachycardia
- Often Stop Eating.
- Definite change in mental status

Common Infections

- **Pulmonary Infections**
- Risk Factors:
 - Poor gag reflex with aspiration
 - Impaired mucociliary clearance
 - Increased esophageal reflex
 - Immobility
 - Dehydration
 - Hospitalization

Prevention of Chest Infections

- Vaccines: Pneumococcal and Influenza.
- Mobilization is extremely important since it improves ventilation effort and reduces atelectasis.
- Adequate hydration allows for the liquidation of pulmonary secretions and better clearance of the secretions.
- Clean environment.

Common Infections

- Gastro Intestinal Infections
- It is a significant cause of morbidity
- Caused by viruses, bacteria and preformed toxins
- Concerns most institutionalized elderly
- Viruses: Rotavirus, parvoviruses.
- Signs: Abrupt onset, abdominal cramps, watery stools without blood
- Occurs more frequently in winter and lasts 2 to 7 days

Treatment of Diarrhea

- Electrolyte replacement
- Replacement of fluids
- C.difficile, stop antibiotic when possible
- Cautions use of antidiarrheals

Common Infections

- **Skin & Soft tissue Infections**
 - Cellulitis
 - Herpes Zoster Infections
 - Pressure Sores
 - MRSA
 - Infections causing diarrhea

Pressure Sores

- Cellulitis of surrounding skin
- Local soft tissue abscess
- Osteomyelitis of the underlying bone
- Bacteremia
- **Risk Factors**
 - Immobility
 - Skin Shear
 - Moisture from urine or stool
 - Protein and Calorie malnutrition
 - Underlying medical condition

Treatment of Pressure Sores

- Identify Pressure Sores early.
- Mobilize patient.
- Avoid all types of incontinence.
- Appropriate nutritional support.
- Remove devitalized tissues early.

- Anti pressure devices may be helpful, especially for pressure sores in the lower extremity.
- Treat with systemic anti microbial only if infection is present.

Common Infections

- **Urinary Tract Infections**
- In the elderly population 30-50% will develop UTI
- More common in women than in men
- Clinical Signs: Back pain, Dysuria, Suprapubic pain, Usually accompanied with confusion, anorexia, abdominal pain, nausea and vomiting.
- Causes: Pseudomonias, E.Coli, Enterococcus Faecalis

Prevention of Urinary Tract Infections

- Avoid catheterization whenever possible.
- Adequate fluid intake.
- Good personnel hygiene.
- Always make sure that urine output is adequate and clear.
- Identify any underlying problems as early as possible.