Asepsis

The Foundation of

Infection Control Practices

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Nosocomial Infections Facts

- Nosocomial infections continue to occur in all health care settings
- The risk of nosocomial infections can be reduced simply by understanding and practicing aseptic technique
- Health care personnel have a moral obligation to be the patients advocate
- Microbes are invisible, consequently you must see microbes with your mind's eye
- Man is a natural reservoir for microbes
- · All microbes can be a source of infection
- · A conscious careful attitude is imperative

Definition of Asepsis

Reducing the number of microbes to an irreducible number

The purposeful prevention of the transfer of microbes from one person to another

Sum total of the effort to keep the patient's environment free from contamination and the patient free from colonization

The principles of asepsis are based on rational thinking and on a strong theoretical and empirical rationale.

In a nutshell it is common sense!

Infectious Disease Theory

Source

+ method of transmission

+ susceptible host



Cornerstones of Medical Asepsis

- * Know what is dirty
- * Know what is clean
- * Know what is sterile
- * Keep these conditions separate
- * Remedy contamination immediately

Principles of Medical Asepsis

When the body is penetrated, and natural barriers such as the skin is bypassed ,the patient is susceptible to any microbes that might enter

Principles of medical asepsis

Even though intact skin is a good barrier against microbial contamination, a patient can become colonized with microbes if appropriate precautions are not taken.

Principles of medical asepsis

All body fluids from any patient is considered contaminated

Principles of medical asepsis

The healthcare team and the environment can be a source of contamination for the patient.



HANDWASHING

IS THE SINGLE MOST IMPORTANT PROCEDURE FOR PREVENTING NOSOCOMIAL INFECTION.

When & how
Soap or antiseptics
The use of gloves

Other Principles of Medical Asepsis

Assess each patient to determine if he has an infectious process

Choose the barrier appropriate to the infectious process

Isolate the disease not the patient.

The chain is as strong as the weakest link

Other Principles of Medical AsepsisAntiseptics

Antiseptic-agent used to kill or inhibit skin microbes

Disinfectant-agent used to kill or inhibit environmental microbes

Antiseptics are not disinfectants!!

Antiseptics and disinfectants should be used according to label

Antiseptic Characteristics

Rapid reduction of flora

Wide range of killing power

Absence of absorption across skin/mucous membranes

Know the appropriate dilution



Surgery increases the risk of infection!

Surgical Principles of Asepsis

Know what is sterile

Know what is not sterile

Keep the two apart

Remedy contamination immediately

Surgical Principles of Asepsis

- The patient should not be a source of contamination
- The OR Team should not be a source of contamination- no infection- proper apparel, no jewelry, no long nails or nail polish
- The surgical scrub must be done meticulously
- The OR Technique of the surgeon is of utmost importance
- Recognize potential environmental contamination proper room cleaning, doors kept closed- no tacky mats

Define Sterility

- Gowns are considered sterile in front from chest high to the operative level
- Sterile persons should keep hands in sight and keep them at or above waist level
- Contamination occurs when sterile gown and drapes are permeated
- Tables are sterile only at the operative level

All instruments entering the sterile field must be sterile



Maintain Sterility

- · All items used within the sterile field must be sterile
- · Articles of doubtful sterility are considered unsterile
- Sterile persons touch only sterile items or sterile areas
- Unsterile personnel stay beyond one foot of the sterile field
- Every case is considered dirty and the same infections control precautions are taken for all patients

Remedy Contamination Immediately!!

- When contamination occurs, take care of it immediately
- Break in technique is pointed out and action is taken to change situation i.e. change gloves

To look is one thing
To see what you looked at is another
To understand what you see is a third
To learn from what you understand is still
something else

But to act upon what you have leaned is what really matters

Asepsis..... the right touch

Other 2005 Teleclasses For more information, refer to

www.webbertraining.com/schedule.cfm

June 30 - Infection Control in First Response Emergency Services with Margaret McKenzie

July 14 - Emerging Infectious Diseases with Dr. Coleman Rotstein

<u>July 19</u> – (British Teleclass) After the Tsunami: Infection Control in Natural Disasters

<u>August 11</u> - Effective Presentation of Infection Control Data

<u>August 11</u> – Community Acquired MRSA, A Growing Problem with Dr. Rachel Gorwitz

Questions? Contact Paul Webber paul@webbertraining.com