Skin Infection Prevention and Control

Training material developed in collaboration with:

CLIPS CONSULTING, LLC
Clinic Infection Prevention Support

CHIROCARE™

Objectives

- Identify risk factors for individuals who may have skin infections
- Recognize prevention strategies for skin infections in healthcare settings
- Identify risks and prevention strategies related to skin infections in athletes

Pre-test

1. **True or False**

Some risk factors for MRSA infection are:

- Contact with body fluids from others
- Drainage and/or open sore that have MRSA present.

2. **True or False**

MRSA may be found on hard sports equipment, machine surfaces as well as treatment tables.

Pre-test

3. **True or False**

Athletes who have visible open sores or drainage from a sore that can not be easily contained by a bandage should be restricted from training and contact sports participation until areas are healing and drainage can be controlled.

4. **True or False**

EPA approved disinfectants used according to manufacturer recommendations are effective against MRSA.

Pre-test

5. Prevention strategies against multi-drug resistant organisms like MRSA include: (select all that apply)
   a) Hand hygiene before and after patient care
   b) Disinfection of surfaces & equipment used during the care
   c) Cleaning only the items in the room if they look soiled between use

6. CDC says antibiotic use: (select all that apply)
   a) Up to half of antibiotics used in humans and much of antibiotic use in animals is unnecessary and inappropriate and makes everyone less safe.
   b) Antibiotics are essential in the treatment of all infections
   c) Antibiotics should be avoided except for extreme infections

Introduction

- The prevention of multidrug resistant infections in persons in the US is one of the top priorities of US healthcare agencies.
- Availability of effective antibiotics to treat some of these organisms is becoming close to zero.
- Contact sports can be a risk environment for acquiring antibiotic resistant infections like MRSA

What are common skin infections?

- MRSA (*Methicillin resistant Staphylococcus aureus*)
  - Infections with this bacteria can be difficult to treat due to resistance to many commonly used antibiotics.
- Pink Eye (*conjunctivitis*)
  - Eye infections or irritations can be caused by bacteria, viruses or allergens.
- Scabies (*Sarcoptes scabieivar hominis)*
  - Skin infection caused by an itch mite. Transmitted by direct contact with an infected area and appears as a rash. Scabies is one of the three most common skin disorders in children, along with ringworm and bacterial skin infections.
- Chickenpox (*Varicella zoster)* & Shingles (*Herpes zoster)*
  - Two infections caused by the same virus

What is MRSA?

- Methillin Resistant Staphylococcus Aureus (MRSA) is:
  - A gram positive bacteria
  - It is frequently found in the nose, respiratory tract, and on skin.
- Although S. aureus is not always pathogenic, it can be a common source of skin infections such as abscesses and respiratory infections.
- MRSA has become resistant to most of the antibiotics used to treat the bacteria. This situation often occurs as a result of general overuse of antibiotics which results in the development of more antibiotic resistance.

What are MRSA symptoms?

- Often MRSA infections starts out looking like a spider bite.
- The area looks like a bump that can be:
  - Red
  - Swollen
  - Painful
  - Warm to the touch
  - Full of pus or drainage
  - Accompanied by a fever

Where is MRSA?

- Today, MRSA is seen in both hospitals and long term care facilities as well as in non-healthcare environments including:
  - Contact sports
  - Exercise facilities.

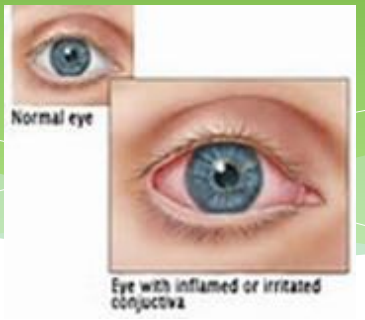
- Additional caution should be exercised when caring for patients with skin lesions and those who may have a skin lesion related to contact sports or from contact with exercise equipment.

MRSA in a Chiropractic Clinic?

- Patient athletes may have MRSA related signs and symptoms
  - Be prepared to speak about potential MRSA risks

- Reminder to always practice "standard precautions" regardless of MRSA risk:
  - Hand Hygiene – Perform before and after all patient care interactions
  - Use gloves – When there is a risk of contact with body fluids and while using disinfectants.
  - Disinfect equipment – Anything used during treatment including treatment tables, counters, and other cleanable surfaces in the room.

What is Pink Eye or Conjunctivitis?



- Presentation and Transmission:
  - The eye and surrounding mucous membrane is inflamed which makes blood vessels more visible & gives the eye a pink/red color.
  - This infection is usually seen in children but can also occur in adolescents and adults.
  - It is transmitted from hands that have touched the infected eye or eye drainage, from eye glasses, from makeup or items that the infected person's hands touch after touching the eye/drainage & not performing hand hygiene.

Pink Eye Control in a Healthcare Setting

- Avoid touching your eyes, perform hand hygiene before & after touching the eye.
- Disinfect work & patient care surfaces between patients in healthcare settings.
- Restrict patient contact until drainage ceases

What is Scabies?

- Scabies is an infection of the skin by the human itch mite. The microscopic mite burrows into the upper layer of skin where it lays eggs.
- The scabies mite usually is spread by direct, prolonged, skin-to-skin contact with a person having scabies. The most common symptoms of scabies are intense itching and a pimple-like skin rash.
- In persons who have not had scabies previously, the incubation period is 4-6 weeks after exposure. In persons who have had scabies before, it can be 1-4 days.
- The communicable time period for scabies is from the day the individual has scabies mites on them until they have been removed/destroyed and the environment, clothing, & bedding have been hot water washed or treated.

Scabies Infection Control in a Healthcare Setting

- Clothing worn during and prior to treatment need laundry in hot water or to be dry cleaned. This includes linens. Items that cannot be laundered or dry cleaned can be sealed in a bag away from human contact for 3 days.
- Disinfect patient contact surfaces between patients including pillow cases & table paper/ sheets.
- Defer treatment if scabies suspected, when possible. If not possible, put on disposable gown & gloves for patient contact and discard these items in a trash bag carefully before leaving the treatment room. Tie the trash bag shut and discard with regular waste after 3 days.
- 10 minutes of skin contact can be an exposure. Scabies is very contagious. Consider restricting patient care until cleared by medical evaluation.

What is Chickenpox?

- The symptoms of chickenpox are fever, headache, feeling tired and an itchy rash of blisters.
  - The blisters appear over most of the body.
  - Chickenpox is spread via air when an infected person coughs, sneezes, or by touching the blisters.
- The chickenpox incubation period is 10-21 days after exposure to someone with the infection.
- Chickenpox is infectious from 1-2 days before the blisters appear & until all the blisters have scabs.

What is Shingles?

- Shingles is the recurrent form of Chickenpox. The virus lies dormant in the body until stress or other situations it can reactivate.
- Shingles is only infectious to people who have not had Chickenpox and then it is expressed as Chickenpox.
- Shingles (herpes zoster) is primarily transmitted by contact with the drainage. When the blisters become crusted and dry they are not considered infectious.
- The Shingles rash blisters that then scabs over in 1-2 weeks and clears up in 2-4 weeks. The rash/blisters usually appear on one side of the body and/or on one side of the face.

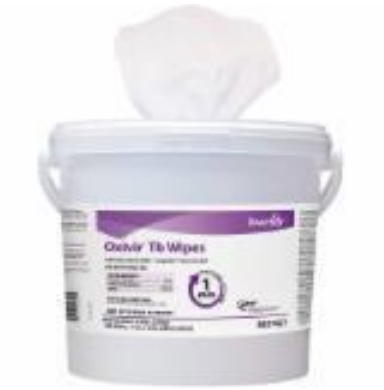
Skin Infection Control Strategies in Health Care

- Though some organisms are difficult to destroy in a person with the infection, they may be effectively killed or inactivated by most of the healthcare infection control strategies.
  - Disinfect patient care surfaces between patients.
  - Use gloves while cleaning equipment.
  - Perform hand hygiene before and after caring for patients and disinfecting the environment.

Use EPA approved disinfectants and look for the MRSA effectiveness claim on the label

Oxivir® Tb Wipes

Ready-to-use disinfectant cleaner based on proprietary hydrogen peroxide (AHP®) technology to deliver fast, effective cleaning performance. Disinfects in 60 seconds. Virucide, bactericide, tuberculocide, fungicide and non-food contact sanitizer. Kills MRSA and Norovirus. Meets bloodborne pathogen standards for decontaminating blood and body fluids. Colorless with a characteristic scent.



Post-test

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Answers

1. T
2. T
3. T
4. T
5. A, B
6. A, B