

Riverside County Regional Medical Center Infection Control

Update

Artificial Nails



THE FACTS:

Nosocomial infections are defined as those infections that a patient acquires in a hospital. These types of infections can arise from many sources within the hospital and, in recent years, experts have begun to look at the artificial nails worn by hospital staff as one of the more serious offenders in this area. Through their studies researchers have found increasing evidence that artificial nails and long natural nails are likely to harbor pathogens (e.g. *Pseudomonas aeruginosa*, *Candida MRSA* and *Serratia marcescens*) that can lead to life threatening nosocomial infections. Some examples of the danger artificial nails pose within the healthcare setting are as follows:

- Between 1997-98, the death of sixteen (16) newborns in a neonatal intensive-care unit at an Oklahoma City hospital were linked to bacteria found under the artificial nails and long fingernails of two nurses. As a result of these deaths the hospital has changed its policy and now requires nurses to have short natural nails. No children in the neonatal ICU have died from bacterial infection since this policy change.
- A study done in 1999 by Hedderwick found that artificial nails are more likely to harbor pathogens and the longer the nails are worn, the more likely a pathogen will be found.
- A study done in 1994 by Wynd found that even after scrubbing, the number of pathogens found on HCWs nails with chipped nail polish is much higher than that found on those with unpolished or freshly polished nails.
- A study done in 1997 by Passaro found that scrub nurses wearing artificial nails reported an increase in glove punctures. This study was performed due to an outbreak of *S. marcescens* in cardiac surgery patients.
- A study done in 1998 by Edel found that even after a 5-minute surgical scrub using microbial soap artificial nails had higher bacterial loads and harbored gram-negative rods compared with natural or unpolished nails.
- Another study done in 2001 found eight infants treated in NICU at St. Louis Children's hospital had clinical *S. marcescens* infection during a 6-month outbreak and another 18 patients had colonization. Nail and hand cultures from a staff member with artificial nails persistently grew same strain as 6 of the infections. The outbreak ended after the staff member who had persistent subungual infection underwent artificial nail removal to eradicate the infection.

Although, proper hand hygiene is essential for preventing nosocomial infections, studies have revealed that some pathogens are still capable of living under long fingernails despite meticulous hand hygiene and rigorous surgical scrubs. These alarming findings have caused the Center for Disease Control and Prevention (CDC) to issue the following recommendation "Do not wear artificial fingernails (of any type) or extenders when having direct contact with patients". Many local hospitals have already implemented policies preventing staff from wearing artificial or long fingernails.

**Effective July 1st 2004, the Fingernail policy of
Riverside County Regional Medical Center will be:**

1. Natural fingernails will not extend more than $\frac{1}{4}$ inch beyond the end of the fingertip so as to allow for thorough cleaning underneath the fingernail and to help prevent glove tears.
2. Artificial fingernails, acrylics, overlays, gels, wraps, tips, silk wraps, or extenders will not be permitted for any employee, regardless of job title, description, position or functions performed. This policy also applies to any contract (registry) employee.
3. Nail polish may be worn only if it is kept well manicured; chipped polish must be removed. Color must conform with RCRMC dress code policy.
4. Nail jewelry, whether glued or pierced through the nail, will not be allowed.

NOTE: The above applies to all Category I and II employees *only*.

