Letters to the Editor

Asepsis Plus/Minus Comfort

To the Editor:

About 40 years ago, we called attention to the inefficacy of surgical gowns.' They were permeable to liquids, which destroyed their value as an aseptic barrier. We did not mention that they were also permeable to gaseous fluids (air), which made them comfortable. Our concept was accepted. However, as a side-effect, it made the wearing of a liquid-proof gown extremely uncomfortable. Surgeons now often are bathed in sweat. But the gown does prevent permeation of contaminated liquids, both by splash and pressure.[2]

Thus was created a new industry, manufacturing what we called an "aseptic barrier,"[3] employing a variety of material both for single and multiple use. Many of the materials are what is termed microporous, allegedly to permit cooling ventilation. It does not. Current waterproof gowns are hot, as they interfere with the required free exchange of air to the gown, so surgeons employ room cooling, often to the detriment of the patient. Pediatric surgeons, finding the cold operating room harmful to their small patients, are thus particularly uncomfortable.

Many of the descriptions of "Universal Precautions" speak of the gowns being "fluid proof." Air is, by definition, a fluid, so they should read "resistant to aqueous liquid strike-through."

Moreover, the recommended practices of the Association of Operating Room Nurses (AORN) specifically state that the sterile area of the gown is the "front from the chest to level of surgical field" as well as the sleeves "from stockinette cuff' to above the elbow. Yet the zeal of the manufacturer (probably abetted by surgeons and nurses) goes even further by creating a "wrapped gown" that doubles the thickness of the gown over the nonsterile back.

My late chief, Dr. Donald Guthrie, when operating upon a goiter, found that his back was turned occasionally toward the instrument nurse and table, so he wore a special sterile vest, fastened by strings in front that he tied. It was recognizable by color, to call attention to the fact that his back was sterile and should be given special respect against inadvertent nonsterile contact and contamination. He wore it only for this operation.

I believe that is a solution that can render present gowns both safe and comfortable. Furthermore, it will call attention to the AORN precept that only the front of the gown and sleeves are sterile. This is accomplished by inserting a colorful back made out of a fish net material (Figures 1, 2) that will provide adequate ventilation. Added exposure to ventilatory air can be achieved by making the back of the undershirt (or the whole undershirt) (Figures 3, 4) of the same material. Such net is presently used in athletic garb and is not expensive. The seam between sterile front and the fish net can be sewn or joined at one side as is outside of the sterile zone. Ties can be used (or a Velcro closure) at the free side. The fish net should be of a distinctive color (I would prefer red), to call attention to the fact that this area is not sterile.

Should the surgeon or some of his or her team members feel that for some particular procedure their back needs to be sterile, they can wear a "Guthrie" vest.

A potential argument against this design would be that it

Continued on page 208

https://doi.org/10.1086/646322 Published online by Cambridge University Press

43% of probe covers are contaminated before use.[1]

Minimize this risk with the Tempa•DOT® Single-Use Clinical Thermometer System



Sterile— each Tempa•DOT Thermometer is used only once and discarded, minimizing the risk of passing harmful microorganisms from patient to patient.

Accurate— innovative thermometric technology provides consistently exact readings. Proven on patients of all ages.

Fast— Tempa•DOT Thermometers give oral readings in just *60* seconds!

Versatile and Economical— suitable for oral, axillary and rectal use throughout the institution, no back-up system necessary. Costs no more than other systems.

1. Smith, **Leon:** Prince, Herbert N.: Johnson, **Edward:** Bacteriologic Studies on Electronic **Hospital Thermometers:** Infection **Control** 1981; Vol. 2, No. 4; p. 316

For a free Tempa•DOT Thermometer trial, call 1-800-526-3538 (In New Jersey, call 908-526- 1222)

Tempa•DOT®

Single-Use Clinical Thermometers

PyMaH Corporation, 89 Route 206, P.O. Box 1114, Somerville, NJ 08876 USA

Visit us at APIC, Booth #315.

https://doi.org/10.1086/646322 Published online by Cambridge University Press



FIGURE 1. Front of gown. Note that the entire front and sleeves are made of a liquid restrictive material.

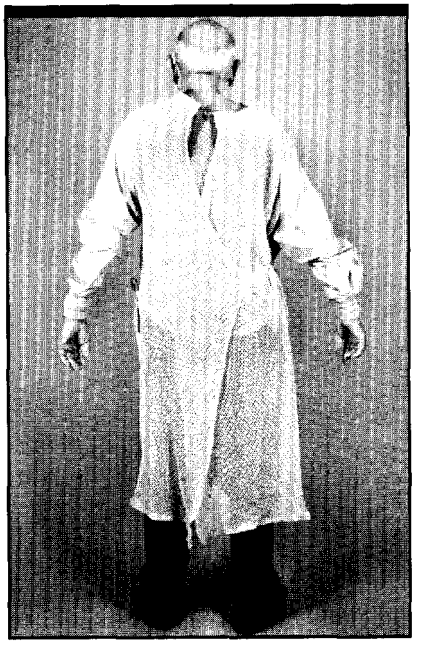


FIGURE 2. Back of the gown made of fish net. This fish net should be of a distinctive color to remind everyone that it is not sterile.

Continued from page 206

exposes the back of the wearer to splash and thus might expose him or her to viral infected patient body liquids. I concede this, but counter that I have never seen the back of the surgeon blood stained, except when he or she sat down on a bloody stool. This could, I believe, be avoided by an observant circulating nurse.

William C. Beck, MD
Guthrie Foundation for
Medical Research
Sayre, Pennsylvania

REFERENCES

1. Beck WC, Collette 'I False faith in the surgeon's gown and drape. ***Am J Surg.*** 1952;83:125.
2. Smith J, Nichols R. Barrier efficiency: are we really protected from patient's pathogens? ***Arch Surg.*** In press.
3. Beck WC, Carlson W. Aseptic barriers. ***Arch Surg.*** 1963;87:288.



FIGURE 3. Front of undershirt made of the same material as we presently use. This could also be made of fish net, although I believe that the see-through aspect might discourage this.

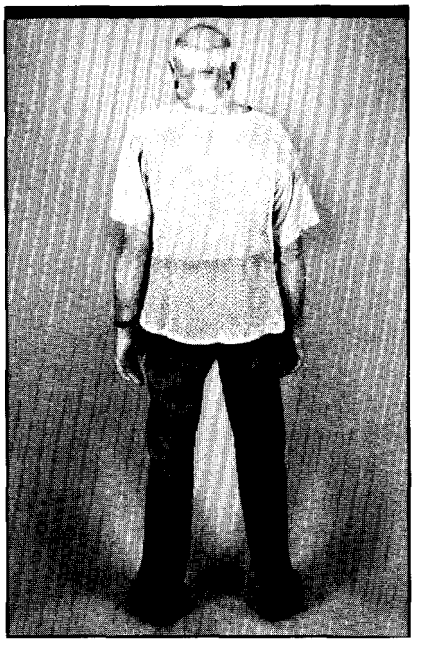


FIGURE 4. Back of undershirt made of same fish net material.

Urinary Tract Colonization With Methicillin-Resistant Staphylococcus aureus

To the Editor:

The Topics in Long-Term Care column entitled "Methicillin-Resistant *Staphylococcus aureus* in Long-Term Care Facilities" by Kauffman, Bradley, and Terpenning (1990;11(11):600-603) was extremely helpful both in its content and form.

There was one item that was overlooked that in the southern California area has been a continuous and increasing problem. That is the problem of methicillin-resistant *Staphylococcus aureus* (MRSA) cultured from the urinary bladder in patients with or without a catheter. What is the treatment of choice if the patient meets the criteria on being only

Continued on page 210

https://doi.org/10.1086/646322 Published online by Cambridge University Press