

Providing skin care for bariatric patients

Specialized knowledge of common conditions and their treatments can help clinicians meet this challenge.

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How would you react if you heard a 600-lb patient was being admitted to your unit? Some healthcare professionals would feel anxious—perhaps because they’ve heard bariatric patients are challenging to care for, or they feel unprepared to provide their care.

With the obesity epidemic showing no signs of abating, you’re likely to encounter bariatric patients at some point. How can you care for them with the dignity and respect they deserve? If we expect to conduct “business as usual” on our units, we’ll be caught off guard without the tools and knowledge we need to make the experience a positive one for the patient, family, and staff. This article reviews how to prepare for and manage one of the most challenging aspects of caring for bariatric patients—providing skin care.

Skinfolds: A special focus of care

Bariatrics is the branch of health care that specializes in treating people with obesity and associated conditions. Defined as a body mass index (BMI) over 30, obesity reflects how a person’s weight relates to height. Bariatric patients have an excessively large size, with excess adipose tissue under the skin and throughout the body.

Skinfolds may develop in various locations—including behind the neck; under the arms, breasts, and abdomen; between the inner thighs; and under the pannus (an overlapping tissue flap formed from the abdomen that extends downward like an apron). Complications commonly arise



in skinfolds and include intertriginous dermatitis, candidiasis, and pressure ulcers. (See *Understanding skinfold complications in bariatric patients.*)

OBESE: An apt mnemonic

Use the word OBESE as a mnemonic tool to help you remember key clinical issues in bariatric skin management.

- O:** Observe for atypical pressure ulcer development.
- B:** Be knowledgeable about common skin conditions.
- E:** Eliminate moisture on skin and in skinfolds.
- S:** Be sensitive to the patient’s emotional distress.
- E:** Use equipment to protect the skin and for safe patient handling.

Observe for atypical pressure ulcer development.

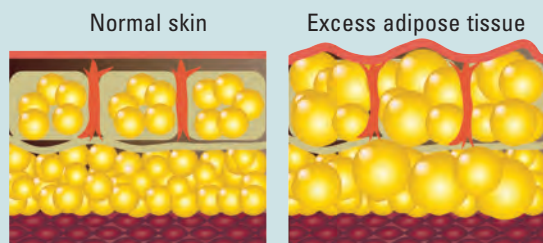
Bariatric patients are at higher risk for pressure ulcers, as their extra padding doesn’t necessarily protect them from the forces of pressure and shear. Although the

Understanding skinfold complications in bariatric patients

Obese patients have increased body mass, which generates more heat. In an effort to restore a normal internal temperature, the body sweats. As a person's weight increases, the ratio of skin surface to internal body mass decreases, impeding the body's ability to cool itself. Skin stays moist with perspiration as the body continues to use this cooling method, which is only partially effective.

Because bariatric patients commonly have excessive moisture on the skin, their skinfolds are highly susceptible to such complications as dermatitis, candidiasis, and pressure ulcers. Poor tissue oxygenation in these patients contributes to the problem. Buildup of adipose tissue in the abdomen impedes the diaphragm's ability to flatten during inspiration, which can cause shallow breathing and impaired tissue and blood oxygenation.

Adipose buildup around the rib cage also poses an obstacle to chest expansion. Adipose tissue itself is poorly vascularized with fewer blood vessels, making it more likely to break down and heal slowly. Poorly oxygenated skin is more susceptible to infection and injury.



data supporting higher risk for this population aren't cut and dried, most expert clinicians believe the risk is higher, so be sure everyone knows that fat pads don't provide protection.

Also, bariatric patients commonly are malnourished and less mobile than others, making it hard for them to avoid excess pressure on the skin. Many have multiple comorbidities, such as diabetes, that further increase their pressure ulcer risk. We lack a risk assessment instrument specifically designed for this population, so we must use our clinical skills and experience to anticipate risk.

In this population, pressure ulcers can develop in atypical and unique locations—

hips, lower back, buttocks, in skinfolds, and in areas with medical devices, such as tubes. Also, foreign objects, such as medicine cups and TV remote controls, can get lost in the bed and lead to pressure areas. Bariatric patients require frequent turning and repositioning to help prevent breakdown from pressure and shear forces.

Be knowledgeable about common skin conditions.

Intertriginous dermatitis is an inflammatory skin condition commonly seen in the skinfolds of bariatric patients. It results from the weight of skin, which creates skin-on-skin contact coupled with friction forces and trapped moisture from perspiration. Dermatitis most often occurs in skinfolds behind the neck, under the arms and breasts, under the abdomen or pannus, on the side, and on the inner thigh.

Intertriginous dermatitis is partial thickness and typically presents in a mirror-image pattern on each side of the skinfold. Initially, the involved area of the skin shows mild redness, which may progress to more intense inflammation with erosion, oozing, drainage, maceration, and crusting. Associated findings include pain, itching, burning, and odor. As clinicians, we should anticipate this problem and not wait for intertriginous dermatitis to develop. To help prevent and intervene for intertriginous dermatitis, read "Eliminate moisture on skin and in skinfolds" below. (For information on other common skin conditions in bariatric patients, see *Candidiasis, acanthosis nigricans, and chafing*.)

Eliminate moisture on skin and in skinfolds.

Many barriers to healthy skin in bariatric patients can be eliminated by reducing moisture on the skin, avoiding skin-to-skin contact, minimizing heat build-up on these tissues, and keeping the skin clean. Using absorbent materials can accomplish these goals. For instance, Interdry AG®

Candidiasis, acanthosis nigricans, and chafing

Candidiasis on the skin of bariatric patients results from *Candida albicans*, which loves the moist, dark, warm environment of skinfolds. Poor hygiene (due to difficulty washing because of excessive body size), hot weather, and tight clothing predispose bariatric patients to this problem.

Typically, candidiasis presents as a consolidated or patchy area of redness with small round papules, pustules, or plaques; in some cases, satellite lesions arise away from the central red area. Patients usually complain of burning, itching, or both.

To prevent candidiasis, keep the skin dry and clean. At the first sign of a problem, take prompt action. Start by applying an over-the-counter or prescription antifungal powder or a silver powder or cream, according to manufacturer's recommendations.

Be aware that *C. albicans* may become resistant to antifungal agents. If your patient's rash

doesn't resolve after 2 weeks of treatment, consider switching to another preparation. Keep the option of oral medication in mind if the rash persists and fails to respond to local treatment.

Acanthosis nigricans is the most common skin manifestation in obese patients. It may be confused with poor hygiene, causing what may look like dirt in skinfolds. This skin condition results from insulin resistance that leads to insulin spillover into the skin.

Lesions are hyperpigmented, thickened, velvety textured macules and patches that may itch and appear warty or leathery. They can arise anywhere but most often show up on intertriginous areas of the axilla, groin, and posterior neck.

No cure for acanthosis nigricans exists, but controlling blood glucose levels can improve symptoms. For cosmetic treatment, preparations with tretinoin, metformin, octreotide, or topical calcipotriol can be

used; laser therapy may be an option, too.

Chafing is caused by skin irritation from repetitive friction, usually caused by skin-to-skin contact or contact between tight fabric and skin. The most susceptible areas are the inner thighs, under the breasts, and skinfolds, armpits, and nipples. The skin injury is partial thickness and red, with edema; in many cases, it causes bleeding and pain.

For prevention, advise patients to wear clothing made of moisture-wicking fabrics (for instance, bike shorts) and to use lubricants on the affected skin, such as petroleum-based products or moisture barrier ointments, skin sealants, or specialty athletic items. Instruct them to cover affected areas with zinc-based ointments or no-sting skin sealants. Inform them not to use normal saline solution on chafed areas as it could cause burning and pain.

Textile (from Coloplast, Inc.) is impregnated with ionic silver, which provides broad-spectrum antibacterial and antifungal action for up to 5 days. It's designed to wick away moisture and reduce skin-to-skin friction.

Clean the patient's skin frequently with a pH-balanced cleanser, using gentle strokes to avoid harming fragile tissues. Avoid scrubbing. Handheld showers and no-rinse cleansers can simplify this process. Advise patients to wear loose-fitting clothing made of absorbent fibers.

Be sensitive to the patient's emotional distress.

Everyone involved in caring for bariatric patients should receive sensitivity training to increase their awareness and compassion. Many of us hold an unconscious negative view of these patients, which can manifest in our interactions with them.

Bariatric patients have reported many incidents of unprofessional treatment by staff who are otherwise excellent caregivers but lack empathy and understanding.

To make matters worse, bariatric patients frequently suffer from depression, altered self-esteem, and social isolation. Take care not to demonstrate prejudice through your actions and words, or to show reluctance to render care due to fear of injury, inadequate equipment, inadequate staffing, or a misunderstanding of obesity.

Be aware of possible obesity bias. View: "Weight bias in healthcare," from Yale Rudd Center.^A



Use equipment to protect the skin and for safe patient handling.

Equipment must be the proper size and

construction to prevent rubbing and creating pressure points against the skin (for example, from the side panels of a too-small wheelchair). Reposition patients frequently to prevent skin breakdown; also, reposition any tubes and tube fixation devices. Use support surfaces of the appropriate weight limit to prevent bottoming out. With skin moisture a common concern, most bariatric patients should use a low-air-loss mattress.

Transferring and moving patients presents a hazard to both staff and patients. Ideally, healthcare facilities should have the proper equipment on hand and ready for use when the patient reaches the unit. The best way to ensure the right type and amount of equipment is to work with companies that specialize in safe patient-handling programs. They can conduct a needs analysis and provide evidence-based recommendations that can be reviewed before equipment purchase or rental. Although facility administrators may believe they lack the budget for equipment purchase, I would advise them they don't have the budget *not* to purchase it. A single lawsuit or injury claim by a patient or a workers compensation claim by staff can cost considerably more than the investment in proper patient-handling equipment.

Meeting the challenge

Specialized knowledge of common conditions and appropriate treatments can help us meet the challenge of caring for bariatric patients' skin. That knowledge must be coupled with planning activities to address such issues as required staff, devices, and lifting and repositioning equipment. Accomplishing these goals long before you hear of a 600-lb patient on the way to your floor will greatly enhance the chance of a successful outcome. ■

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Online Resource

A. <http://www.uconnruddcenter.org/weight-bias-stigma-videos-exposing-weight-bias>