

## MDS Alert

### WOUND ASSESSMENT: The Wrong Dx Can Hurt Residents and Your Survey Record

3 principles keep your quality reporting and wound care plans on the mark.

Leg ulcers may look like decubiti at first glance, but a little detective work can shed light on their true cause. Experts suggest nurses use these guiding principles to steer clinicians responsible for wound diagnosis in the right direction.

Principle No. 1: A pressure ulcer requires pressure to develop. "The definition of pressure ulcer according to the National Pressure Ulcer Advisory Panel is '... any lesion caused by unrelieved pressure that results in damage to the underlying tissues,'" notes **Evonne Fillinger, RN, BSN, WCC, RAC-CT**, who presented on wound care assessment at the October 2008 annual American Health Care Association meeting in Nashville, Tenn.

If the skin ulcer isn't over a pressure site, look for another cause of pressure, such as tubing, orthotics or shoes, suggested **Debra Bakerjian, RN, PhD**, in an Advancing Excellence webinar on pressure ulcer assessment and care.

Principle No. 2: Venous ulcers are related to venous congestion which results in venous hypertension, says Fillinger. To determine if the resident has this problem, review his medical record. And ask the person or his family if he's had a problem with his lower extremities over time, suggests Fillinger.

Also assess the person's legs. A lower extremity resembling an inverted champagne bottle can be a sign of venous insufficiency, as can swelling of the lower leg with "intensely reddened skin."

Key sign: See if the resident has "hemosiderin staining," a permanent brown staining of the leg(s). That's caused when a high degree of pressure in the venous system forces the heme part of the hemoglobin into the skin, Fillinger advises.

Also check out the wound's location and characteristics. "Venous insufficiency ulcers form from the ankle bumps to the knees," says **Michael Miller, DO**, a wound care specialist in Linton, Ind. And "the wound bed is usually shallow or superficial, and beefy red in color," Fillinger says. Drainage can be heavy to "generalized weeping" to none, she adds. And you may see generalized edema.

Tip: The resident may complain of increased pain when the leg is dependent (that is, hanging down), notes Fillinger.

The Rx: Venous ulcers are usually treated by compression therapy, says Fillinger. "And you want to provide excellent skin care, minimizing trauma to the lower extremities," which can result in an open area forming. Also elevate the person's lower extremities at intervals, she adds.

Principle No. 3: Look for signs of poor blood flow and wound characteristics to identify arterial wounds. An arterial wound occurs as a result of arterial occlusive disease where non-pressure occlusion of arterial flow causes necrosis, says Fillinger. Arterial wounds are located over the ankle or bony areas of the foot, she adds. "The wound margins have a 'punched-out' appearance with well-defined, even borders," says Fillinger.

Also look for these indicators, she suggests:

- A pale wound bed with little or no granulation tissue;
- Minimal to no wound drainage;
- An extremity that's cool to the touch (the extremities may appear hairless with shiny skin);

- Blanching of the extremity when elevated;
- Diminished or absent pedal pulses;
- A delayed capillary refill;
- Hair loss on top of the foot and toes;
- Toenail thickening; and
- Complaints of pain when the legs are elevated.

To nail down the diagnosis, the clinician can obtain an ultrasound study to see if the leg is getting adequate blood flow, says **Steven E. Warren, MD, DPA**, a wound specialist in Bountiful, Utah. You may need to refer patients with an arterial ulcer to a vascular specialist to devise a treatment plan, which could include stenting or surgical bypass.

Certain medications can also help arterial disease, including cilostazol, Miller adds.

#### Before You Treat, Check This

Many nursing home residents will have both vascular insufficiency and arterial disease. Thus, Miller advises doing an arterial assessment on any nursing home resident before applying a compressive device or wrap for a venous ulcer. Ditto for treating a leg wound with "any type of radiant energy," such as heat or e-stimulation, Miller adds.

Also consult with a vascular and wound-care specialist before doing treatments on the legs, he adds.

Clinical gem: Make sure the care plan includes pressure relief for any wound, advises Warren. "Even if the wound isn't pressure-related, you don't want pressure to cause more damage." (See the related article, "Put Your Best Effort Forward in Diabetic Ulcer Identification and Prevention" on p. 64.)