Antibiotics and conservative surgery yield similar outcomes in patients with diabetic foot osteomyelitis

A study in Diabetes Care finds that antibiotics and surgery have similar outcomes related to rate of healing, time of healing, and short-term complications in patients who have neuropathic forefoot ulcers and osteomyelitis, but no ischemia or necrotizing soft-tissue infections.

“Antibiotics versus conservative surgery for treating diabetic foot osteomyelitis. A randomized comparative trial” compared two groups: an antibiotics group and a surgery group. Patients in the antibiotics group received antibiotics for 90 days, and patients in the surgery group received conservative surgery with postoperative antibiotics for 10 days.

BIA may help assess patients for lymphedema

A study published in Lymphology reports that bioelectrical impedance analysis (BIA) ratios are useful for detecting lymphedema in patients with breast cancer, giving clinicians more confidence in their assessment.

“L-dex ratio in detecting breast cancer-related lymphedema: Reliability, sensitivity, and specificity” analyzed data from 250 women, including healthy female adults, breast cancer survivors with lymphedema, and those at risk for lymphedema. The results demonstrate that survivors with lymphedema have significantly higher L-dex ratios, which shows the possibility of using BIA to discriminate between those cohorts of women.

The researchers say that using a cutoff of L-Dex ratio >+7.1 (as was done in the study) “still misses 20% of true lymphedema cases.” Therefore, clinicians should “integrate other assessment methods (such as self-report, clinical observation, or perometry) to ensure the accurate detection of lymphedema.”

Offloading-improved custom-made footwear doesn’t reduce incidence of plantar foot ulcer recurrence in diabetes

Use of offloading-improved custom-made footwear doesn’t significantly reduce recurrence of plantar foot ulcers in patients with diabetes compared to nonimproved custom-made footwear, according to a study in Diabetes Care.

“Effect of custom-made footwear on foot ulcer recurrence in diabetes: A multicenter randomized controlled trial” included 171 patients with diabetes and neuropathy who had a recently healed foot ulcer. The patients wore either nonimproved custom-made footwear or custom-made footwear that improved and subsequently preserved offloading (~20% peak pressure relief by modifying the footwear).

However, the authors of the study note that high adherence with wearing the offloading-improved custom-made footwear reduced ulcer risk.
NPWTi may be helpful in infective wounds

An analysis of studies related to the use of negative pressure wound therapy with instillation (NPWTi) of antiseptics reports that instillation may be helpful in some patients with infected wounds, but more research is needed.

The review article “Recommendations on negative pressure wound therapy with instillation and antimicrobial solutions—when, where and how to use: What does the evidence show?” published in the International Wound Journal states, “some reports indicate an outstanding benefit of NPWTi for patients, using antiseptics such as polyhexanide and acetic acid in acute and chronic infected wounds and povidone-iodine as prophylaxis in contaminated wounds with potential viral infection.” The recommended soaking time is 20 minutes for each of the four to eight cycles a day.

The authors note that the prophylactic use of NPWTi with the substances described earlier “can be recommended in contaminated wounds that cannot be closed primarily with surgical means,” but emphasize that more rigorous studies are needed.

Simple compression bandages as effective as massage for lymphedema

A study that enrolled 103 women with breast cancer, 95 of whom were able to be evaluated, has found that simple compression bandages are as effective as massage in the treatment of lymphedema.

In the study, “Randomized trial of decongestive lymphatic therapy for the treatment of lymphedema in women with breast cancer,” one group wore elastic compression sleeve and glove garments on the arm for 12 waking hours a day, while the other group received an hour of lymphatic drainage massage from trained therapists each weekday for 4 weeks along with exercise and skin care. After the month of treatment, patients in the massage group also wore an elastic compression sleeve and glove in the daytime.

No significant difference between the two groups was found in arm function, quality of life, or reduction of arm volume.

The authors of the study, published in the Journal of Clinical Oncology, noted that the failure to detect a difference “may have been a result of the relatively small size of the trial.”

Ostomy bag sensor app released

11 Health, a company based in the United Kingdom, has released Ostom-I Alert, a sensor that attaches to an ostomy bag and notifies the patient by sending an alert to an app on a mobile device when it’s time to empty the bag. Ostom-I, a single-use device, can last up to 11 months and costs $79.99.

The device captures information about the volume of output over a time frame, which the patient can email. Data is also stored on a website, which also contains a list of FAQs.
Internet valid tool for diabetes self-management

Web-based strategies for self-management in patients with diabetes are a “viable option,” according to “Internet interventions to support lifestyle modification for diabetes management: A systematic review of the evidence.”

The authors of the study, published in the Journal of Diabetes and Its Complications, found nine studies that met their inclusion criteria. Two studies found improvements in diet and/or physical activity and two studies found improvements in glycemic control compared with a control. Successful studies included interactive components and opportunities for peer support. Those studies that reported on website utilization found that it decreased over time.

The authors note that future research is needed on the use of Web-based interventions in underserved communities.

Perioperative corticosteroids increase risk of pressure ulcers in CV surgical patients

A study published by the International Wound Journal has found that administration of perioperative corticosteroids in patients undergoing cardiovascular (CV) surgery increases the risk of pressure ulcers.

“Perioperative corticosteroids administration as a risk factor for pressure ulcers in cardiovascular surgical patients: A retrospective study” analyzed 286 cardiac surgery patients; of these, 47 patients developed 57 surgery-related pressure ulcers, an incidence of 16.4%. The incidence of surgery-related pressure ulcers was significantly higher in patients who received corticosteroids compared to those who didn’t receive corticosteroids.

The authors conclude that perioperative corticosteroid administration is an independent risk factor for pressure ulcers in CV surgical patients and recommend that corticosteroids be administered with caution in these patients.

Showers better than foot baths for cleaning chronic limb ulcers

“Which cleansing care is better, foot bath or shower? Analysis of 236 limb ulcers” finds that showering is preferred over foot baths for cleaning chronic limb ulcers. The researchers found that the incidence of loss of all toes or major amputation was significantly higher in the foot-bath group of patients compared to the showering group.
The study in the *International Wound Journal* concludes, “Clinicians should be cautious that inappropriate cleansing may cause ulcer infections to spread.”

**SGAP flap feasible for reconstruction of sacral pressure ulcers**

A study published in the *Journal of Wound Care* has found that a superior gluteal artery perforator (SGAP) flap for the reconstruction of sacral pressure ulcers has “good reliability and minimal complications” and is “highly recommended for the reconstruction of sacral pressure ulcers.”

“Superior gluteal artery perforator flap: A reliable method for sacral pressure ulcer reconstruction” included 15 patients. Success was defined as a healed wound within 30 days of the procedure. All of the wounds healed within 30 days of surgery, wound care, and culture-sensitive antibiotics. No recurrence of the pressure ulcer was noted during the follow-up.

**FDA proposes rule on antibacterial soaps**

The U.S. Food and Drug Administration (FDA) has issued a *proposed rule* to require manufacturers of antibacterial hand soaps and body washes to demonstrate that their products are safe for long-term daily use and more effective than plain soap and water in preventing illness and the spread of certain infections. Under the proposal, if companies don’t demonstrate such safety and effectiveness, these products would need to be reformulated or relabeled to remain on the market. The proposed rule doesn’t affect hand sanitizers, wipes, or antibacterial products used in healthcare settings.

The FDA notes that although consumers generally view these products as effective tools to help prevent the spread of germs, there is currently no evidence that they are any more effective at preventing illness than washing with plain soap and water. In fact, some data suggest that long-term exposure to certain active ingredients used in antibacterial products—for example, triclosan (liquid soaps) and triclocarban (bar soaps)—could pose health risks, such as bacterial resistance or hormonal effects.