Identifying and Managing Skin Issues with Lower-Limb Prosthetic Use

M. Jason Highsmith, DPT, CP, FAAOP, James T. Highsmith, MD, and Jason T. Kahle, CPO

Abstract

Fitting a prosthesis is complicated because parts of the human body are used for tasks for which they are not designed. The skin/prosthesis interface is at fault for many complications. Here, a synthetic material, such as silicone or plastic, is in constant contact with the skin. Skin is not well-suited for this type of material contact. Skin problems are one of the most common conditions affecting lower-limb prosthetic users today. Skin problems are experienced by approximately 75 percent of amputees using a lower-limb prosthesis. In fact, amputees experience nearly 65 percent more dermatological complaints than the general population.

Conclusion

Skin issues are very common among amputees. Because amputees require an unusually high demand from their skin, and because not wearing a prosthesis is often not an option, they sometimes dismiss the importance of hygiene and monitoring of their skin. Skin issues need to be taken seriously. A simple skin breakdown can lead to more severe problems such as infection, cancer, osteomyelitis (bone infection), and ultimately revision surgery. Start with your prosthetist to determine, and hopefully resolve, the problem. If your prosthetist cannot find a solution, you may need to consult a specialist, such as a dermatologist.

