

Going by the Waistline: BMI and Amputees

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It is no secret that an ever-increasing number of Americans are overweight or obese. An Internet search for body mass index (BMI) will find millions of Web sites about BMI: what it is, how to calculate it and how to reduce it. For amputees, however, this epidemic causes additional problems that may affect their daily lives and their ability to continue activities they may enjoy. But the situation is not hopeless. O&P practitioners often need to lead the way to a healthier life for their patients.

Amputees with high BMI face an additional set of issues that do not affect amputees in the normal weight range. First it is more difficult to fit a prosthesis on a limb with an excess of soft tissue. Typically, the interface locks onto the bones in the residual limb, but extra soft tissue makes that difficult or impossible, said Jason T. Kahle, CPO, LPO, staff prosthetist for Westcoast Brace and Limb in Tampa. High BMI in amputees also affects issues like edema and volume changes, making them more prevalent. Exercising- the main component to reversing excess weight - becomes even harder and less likely when an amputee is overweight or obese.

The effort expended when walking is exponentially greater for overweight or obese amputees. The heavier the person, the more effort it takes to walk because the body was not designed to carry the extra weight. Added to this effort is the fact that the amount of energy required for an amputee is greater than that for a person with two natural legs. This often results in decreased motivation, increased sedentary lifestyle and additional weight gain.

Amputees also need to worry about various comorbidities that may develop. In addition to diabetes, which often necessitates the amputation in the first place, many amputees also may develop cardiovascular issues or hypertension due to continued poor dietary choices, the accumulation of fatty tissue and lack of exercise, such as being confined in a wheelchair. Practitioners and other health care professionals should think about these issues when recommending that amputees increase their activity levels. Neglecting to consider additional complications could result in inflicting more harm than good.

It may not be in O&P practitioners' job description to prescribe exercise, but Kahle stresses the importance of referring back overweight or obese patients to their primary care physicians. Physicians should create a nutrition and exercise plan for their patients and monitor them - and their glucose levels, blood pressure, and medications - over a certain period of time. If part of the plan involves weight loss medication, the physician should ensure that it does not conflict with other medications.

A multidisciplinary approach to treatment is the best path to success. Each member of the health care team is integral in aiding patients' weight loss. "It is your duty as an orthotist or prosthetist [to] bring up this subject with your patients," Kahle said. "O&P practitioners are viable members of the medical community and it is their job to get involved." When approaching the issue with his patients, Kahle suggests speaking with the physicians first and citing the biomechanical reasons for weight loss. He adapted this tactic because he finds that many patients are noncompliant. He emphasizes that practitioners should realize that overweight and obese amputees risk disqualifying for prosthetic fitting.