Lower Extremity Lymphedema & Melanoma

Dear OncoLink "Ask The Experts,"

What is the likelihood of developing lymphedema following a dissection of the external lymph nodes of the groin area for treatment of Stage III melanoma? Is lower extremity lymphedema more common or worse than arm lymphedema?

Of the percentage of patients who develop lower extremity lymphedema after such a procedure, what percentages are manageable, severe and debilitating? (I have been told that there can be excessive pain and splitting of the skin--how likely is this?)

Linda McGrath Boyle PT, DPT CLT-LANA, Cancer Rehab Specialist and OncoLink Lymphedema Team Editor, responds:

Lower extremity lymphedema is a side effect of treatment of melanoma. Lower extremity swelling may be less visible to survivors than arm/hand edema due to the fact that our legs are further away from our eyes and are often covered with clothing/shoes throughout the day. Also, the leg/foot is larger and often able to hold more volume before swelling is noticed. We also use are hands for fine motor activities (typing, writing, buttoning, etc) and need dexterity to accomplish these tasks.

On the other hand, our legs are in the dependent (downward) position all day and so may tend to swell due to the effects of gravity on swelling in early stages of lymphedema.

Lymphedema is a progressive problem, but if treated early with complete decongestive therapy by a qualified certified lymphedema therapist (CLT-LANA initials behind their name), the progression can be slowed. It is not usual to see patients with excessive pain due to lymphedema itself. Lymphedema is not a painful condition. Rather, the affected leg may feel heavy and achy, and may feel numb. Splitting skin need not occur with proper treatment, including meticulous skin and nail care as well as complete decongestive therapy by a lymphedema therapist.

Many melanoma survivors who have been diagnosed with lymphedema lead very active, normal lives. Living with lymphedema takes extra work. Many people need to bandage their legs at night, wear elastic compression garments every day that must be replaced every 6 months, and participate in regular exercise. You may contact the National Lymphedema Network for more information on risk factors, proper care, and available treatment centers.

The abstract below describes a study that compared sentinel node biopsy to complete groin dissection. The groin dissection group was small, but it gives you an idea of the statistics.

**Morbidity after inguinal sentinel lymph node biopsy and completion lymph node dissection in patients with cutaneous melanoma**

**Author:** M. de Vries et al.

**Background**

Aim of the study was to assess the short-term and long-term morbidity after inguinal sentinel lymph node biopsy (SLNB) with or without completion groin dissection (GD) in patients with cutaneous melanoma.

**Methods**

Between 1995 and 2003, 127 inguinal SLNBs were performed for cutaneous melanoma. Sixty-six patients, median age 50 (18–77) years, met the inclusion criteria and were studied. Short-term complications were analyzed retrospectively, while long-term complications were evaluated using volume measurement and range of motion measurement of the lower extremities.
Results
Fifty-two patients underwent SLNB alone (SLNB group) and 14 patients underwent completion groin dissection after tumour-positive SLNB (SLNB/GD group). Morbidity after SLNB alone: wound infections \((n = 1)\), seroma \((n = 1)\), postoperative bleeding \((n = 1)\), erysipelas \((n = 1)\), and slight lymphedema 6% \((n = 3)\). Morbidity after SLNB/GD: wound infections \((n = 4)\), seroma \((n = 1)\), wound necrosis \((n = 1)\), postoperative bleeding \((n = 1)\), and slight lymphedema 64% \((n = 9)\). There were differences between the two groups in the total number of short-term complications \((p < 0.001)\), volume difference \((p < 0.001)\), flexion \((p = 0.009)\), and abduction \((p = 0.011)\) limitation of the hip joint.

Conclusion
Inguinal SLNB is accompanied with a low complication rate. However, SLNB followed by groin dissection is associated with an increased risk of wound infection and slight lymphedema.


3/2/08

No