MINIMAL INCISION EXTRACTION FOR LARGE LIPOMAS

Minimal incision extraction involves expressing lipomas through a small incision or punch using a squeeze technique.

By Kraig K. Jenson, MD, Byron C. Edwards, PA-C, PhD, and Devin M. Burr, MS IV

Lipomas are common benign tumors of adipose tissue. Typically, lipomas are considered an incidental finding, but in some cases, they appear due to familial multiple lipomatosis. Lipomas are more common in patients with diabetes, hyperlipidemia, and obesity. Occasionally, they appear in an area of preexisting trauma. Most are just a few centimeters in diameter, but in more rare cases, they can enlarge to more than 10cm. Lipomas are considered asymptomatic, but can be uncomfortable when they compress nerves. Pathologically, lipomas are composed of fat cells with small, uniform, and eccentric nuclei. The cells arrange into lobules with capillaries diffusely placed throughout.

Some common treatment options include elliptical excision, liposuction, and injection lipolysis. Using an elliptical excision leaves patients with a lengthy scar that might be cosmetically unappealing to patients. Liposuction requires a larger setup than an excision and is typically a longer procedure. Injection lipolysis has been shown to decrease the size of lipomas, but commonly requires multiple treatments.

Recently, a study was performed on another technique for small lipoma removal using minimal incision extraction. This squeeze technique was first described by Kenawi in 1995. Minimal incision extraction involves expressing lipomas through a small incision or punch using a squeeze technique. In the study, researchers found that practitioners are more hesitant to use minimal incision extraction with larger lipomas given the increased difficulty and longevity of the procedure compared to smaller lipomas. We have found minimal incision extraction very successful with both small and large lipomas. We report a case where we recently removed a large lipoma off the upper back using the squeeze technique and dissection.

CASE REPORT

A 34-year-old male presented to our clinic with a five-year history of a slightly growing and painful lump on his back that was roughly 15cm in diameter (Figure 1). We performed a one-inch incision in the center of lipoma and used significant squeezing to remove the large lipoma. Given the size of the benign tumor, dissection was also needed to remove the lipoma (Figure 2). Hemostasis was achieved throughout the procedure. To prevent fluid filling and closure of the empty space, we inserted a Jackson-Pratt Drain, performed a three-layered suture closure (Figure 3), and applied a pressure dressing. The dressing was removed in our office on post-op day two with 60cc of serum collection in the drain and no signs of infection. The following day, we removed the Jackson-Pratt Drain totaling the serum to 70cc over three days. The sutures were removed on post-op day 14 without complications.
DISCUSSION

We have used minimal incision extraction on lipomas for many years and have been pleased with the results. After using both methods, we feel minimal incision extraction is superior to elliptical excisions because it can be easily performed in an office visit without having to reschedule for a more-lengthy elliptical excision. Also, in our clinical experience, patient satisfaction has been high as a result of the low recurrence rate, quick recovery, and low morbidity. We have found the procedure to be relatively simple. Typically, lipomas will express easily with gentle squeezing, but with larger lipomas, dermatologists can use scissors or blunt dissection with a finger to remove the fatty growth. Minimal incision extraction is more time consuming than performing elliptical excisions, but we believe that patients appreciate the decrease in scar size compared to the longevity of the procedure. We typically do not use closed-system drains like the Jackson-Pratt Drain mentioned above, except in cases of larger lipomas where the risk of hematoma is higher. In those particular cases, using a three-layered closure and/or placing a closed system drain has been efficacious for us in decreasing hematoma risks.

Despite the availability of many treatment options for lipoma removal, we believe that minimal incision extraction is a superior treatment given the simplicity of the procedure and the consistent patient satisfaction. As dermatologists familiarize themselves with the squeeze technique with smaller lipomas, they can become more comfortable removing larger lipomas in a similar fashion. A detailed study on minimal incision extraction for larger lipomas is still needed, but in our experience, it is a safe and efficacious treatment option to consider.

Kraig Jenson, MD is a clinical dermatologist in Orem, UT, and has been for over 30 years. He graduated medical school at the University of Utah.

Byron Edwards has been working in dermatology with Dr. Jenson for the past 15 years. Previously, he was a clinical psychologist after graduating from Yale University.

Devin Burr is a fourth-year medical student at Western University of Health Sciences and previous medical assistant of Dr. Jenson.