Aspiration of Hematomas

RONAK M. PATEL, MD AND JOHN A. BERGFELD, MD
Cleveland Clinic Foundation, Cleveland, Ohio

Blunt trauma to an athlete can occur in almost any team or individual sport. A majority of the time there will be minimal ecchymosis or mild swelling. However, occasionally the force of the injury is great enough to result in a large hematoma. Hematomas in the soft tissues can be not only painful but also damaging to the local tissue with potential to cause skin necrosis. Evacuation of a hematoma to decompress the soft tissues is typically unsuccessful with a needle and syringe secondary to the viscosity of the hematoma. We recommend decompression under local anesthesia using a liposuction cannula and vacuum.

Our published technique in *JBJS* (Dowden RV, Bergfeld JA, & Lucas AR, 1990) notes case reports of treated hematomas to the calf of one diver, and ankle injuries in two other people. This technique has been employed in athletes of varying competitive levels and at multiple sites including subcutaneous hip pointer, groin, and knee. The athlete will notice an immediate relief in pain from the decompression while the swelling and ecchymoses resolve gradually soon thereafter.

An interval of one week between the injury and aspiration appears to be safe and the technique has been performed up to four weeks after injury. The previously mentioned citation contains full technical notes.

In brief, a local anesthetic is used only for a 1 cm incision on healthy skin adjacent, but not overlying, the hematoma. A 3 mm liposuction cannula is introduced through the subcutaneous fat into the hematoma. Suction is then initiated mechanically through a vacuum or manually with a 30 cc syringe attached to the cannula. The cannula opening is directed towards the wall of the cavity rather than the underlying muscle/tendon or overlying skin. After decompression, an elastic bandage is applied and the athlete is encouraged to elevate their extremity until the edema resolves.

However, this technique is not recommended for all hematomas. If an athlete has a persistent painful hematoma this technique should be compared to open evacuation.