

describe hearing a “snap,” “pop,” or “tearing.” Pain may or may not be the principal subjective symptom, and in some children, it may prevent optimal examination of ligamentous instability. There is a rapid onset of swelling, often diffuse, accompanied by immediate disability and appreciable reluctance to use the injured joint.

Strains

A strain is a microscopic tear to the musculotendinous unit and has features in common with sprains. The area is painful to touch and swollen. Most strains are incurred over time rather than suddenly, and the rapidity of the appearance provides clues regarding severity. In general, the more rapidly the strain occurs, the more severe the injury. When the strain involves the muscular portion, there is more bleeding, often palpable soon after injury and before edema obscures the hematoma.

Therapeutic Management

The first 12 to 24 hours are the most critical period for virtually all soft-tissue injuries. Basic principles of managing sprains and other soft-tissue injuries are summarized in the acronyms **RICE** and **ICES**.

Rest	Ice
Ice	Compression
Compression	Elevation
Elevation	Support

Soft-tissue injuries should be iced immediately. This is best accomplished with crushed ice wrapped in a towel, a screw-top ice bag, or a resealable plastic storage bag. Chemical-activated ice packs are also effective for immediate treatment but are not reusable and must be closely monitored for leakage. A wet elastic wrap, which transfers cold better than dry wrap, is applied to provide compression and to keep the ice pack in place. A cloth barrier should be used between the ice container and the skin to prevent trauma to the tissues. Ice has a rapid cooling effect on tissues that reduces edema and pain. Ice should never be applied for more than 30 minutes at a time.