The ATLAS Procedure for Thumb Arthritis

Thumb Basal Joint Arthritis, or Carpal-Metacarpal (CMC) Arthritis is a very common, and often debilitating condition. Patients present with pain at the base of the thumb, often with loss of motion and function. Things such as pinching, opening jars, turning keys, using scissors, or even pulling on your pants become difficult. Since the opposable thumb is one of the things that makes us uniquely human, loss of normal thumb function can be disabling. In addition, thumb CMC arthritis is commonly associated with thumb CMC instability, which contributes to thumb weakness.

When non-operative treatment (including rest, medication, splints, and injections) fail to keep symptoms under control, surgery is an option. Present thumb arthritis surgeries often include ligament reconstruction with tendon grafts harvested from the patient. These surgeries usually require cast immobilization, and a long recovery. While frequently successful in the long-term, these are often very uncomfortable and difficult for the patient post-operatively, often for many months. Other options, including metal joint replacements, and even fusion are less successful.

None of these procedures satisfy all the requirements of an ideal thumb CMC procedure; a strong, stable, anatomic reconstruction, avoiding the need for a tendon graft harvest, and the ability to avoid immobilization and begin early motion.

The ATLAS procedure, or the Anatomic Thumb Arthroplasty Ligament System, has been developed by Dr. Weiss to treat thumb arthritis. This is a truly anatomic thumb CMC reconstruction procedure that does not require a tendon graft harvest, provides strong, stable fixation of the thumb, avoids any casting, and allows early range of motion and early return of activities. This is a relatively simple and very successful procedure, done in an outpatient setting (awake if you want it), and takes under an hour.

Postoperatively, you will have a bandage and splint on your hand for about a week. After that, the bandages are removed, and early use of the thumb and hand is started. After six weeks, full activity is allowed.

