

Cubital Tunnel Syndrome in Adolescent Baseball Players: A Report of Six Cases With 3- to 5-Year Follow-up

Sapporo Medical University

Mitsuhiro Aoki, M.D., Ph.D, Kohei Kanaya, M.D., Ph.D., Hikono Aiki, M.D.,
Takuro Wada, M.D., Ph.D., Toshihiko Yamashita, M.D., Ph.D.,
Naoshi Ogiwara, M.D., Ph.D.

In this case report, we describe the clinical features and surgical outcome of cubital tunnel syndrome in adolescent baseball players.

Two infielders, 2 pitchers, and 2 catchers who suffered cubital tunnel syndrome during adolescence (average age, 14 years) were surgically treated. Symptoms of medial elbow pain first appeared during throwing in competition games in summer or autumn seasons. After the onset, they suffered limitation of elbow extension and weakness on grabbing balls. They could not throw because of recurrent medial elbow pain. Laxity of the medial collateral ligament was not detected by stress radiography. Duration of symptoms from the onset to surgery was less than 6 months for 2 patients, 1 year for 2, and longer than 2 years for 2 patients.

Anterior subcutaneous transposition of the ulnar nerve relieved symptoms up to 3.3 postoperative years. Medial protrusion of the triceps muscle was observed to cause irritation of the ulnar nerve. Fibrosis surrounding the ulnar nerve was observed without pseudoneuroma. Throwing performance returned completely to competitive level in 5 months postoperatively in 5 of 6 patients.

Early diagnosis of cubital tunnel syndrome in adolescent baseball players is very important. Anterior subcutaneous transposition of the ulnar nerve relieves symptoms and restores throwing function.

Key Words

Baseball - Adolescent - Thrower - Cubital tunnel syndrome - Medial elbow pain