

Scientific Study

Reconstructive Screws Cause Unexplained Allergy

“The failure to find a source for symptoms regardless of how vague and subjective does not in itself repudiate the validity of a true biochemical etiology.”

Unexplained allergies can be annoying, sometimes debilitating, and often frustrating for both doctors and patients alike. When medical providers cannot find a cause for what they refer to as “vague” and “subjective” symptoms, patients are frequently assumed to be depressed or anxious and referred for derisory psychiatric therapy.

However, the failure to find a source for symptoms regardless of how vague and subjective does not in itself repudiate the validity of a true biochemical etiology.

Researchers at the University of Athens Hospital provide supportive testimony with a scientific review of a 30 year old patient who complained of inability to focus mentally, rash, chronic fatigue, decreased sex drive, and hair loss.

Detailed allergy testing showed a positive value for biodegradable poly-L-lactic acid (PLLA). As it turns out, the patient had two PLLA screws placed after anterior cruciate ligament (ACL) reconstructive surgery on his knee. His symptoms began a few months after the surgery and produced a systemic allergic reaction.

Surgeons removed one of the two screws which resulted in marked symptom reduction. When the remaining screw and screw rests were later removed, all symptoms disappeared and the PLLA antigen level in follow-up allergy testing had diminished.

This case has a respectable ending. But for many who do not receive care at university research hospitals, an obscure allergy to PLLA would not likely lend itself to discovery. Patients may be left to manage symptoms with pharmaceutical drugs and coping skills instead.

Physicians can help by listening carefully to patients, believing what they report, and exhausting all reasonable possibilities before assuming a status of malingering or psychiatric imbalance. Patients can help by keeping track of new surroundings, changes in diet, new products, and other possible allergic triggers and reporting suspicions to their physician. It is crucial that patients and physicians work as a health care team.

Reference

Mastrokalos DS, Paessler HH. Allergic reaction to biodegradable interference poly-L-lactic acid screws after anterior cruciate ligament reconstruction with bone-patellar tendon-bone graft. *Arthroscopy*. 2008 Jun;24(6):732-3.

