

# **Oblique Ulnar Styloid Osteotomy - a Treatment for Ulnar Styloid Impaction Syndrome**

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## **Abstract**

**Purpose :** We report a series of 5 patients (mean age 41.4 years) presenting with ulnar styloid impingement syndrome (USIS) treated by an oblique ulnar styloid osteotomy. The purpose of the study was to determine whether the osteotomy is an effective method of treating USIS.

**Methods :** The diagnosis of USIS was made based on a history of ulnar-sided wrist pain supported by clinical and radiological findings. Clinical assessment included provocative tests to differentiate USIS from pain associated with ulnocarpal impaction syndrome. The ulnar styloid length was assessed with a posteroanterior X-ray using the methods of Garcia-Elias and Biyani. The ulnar styloid was deemed excessively long if the ulnar styloid process index was greater than 0.21 or if the overall styloid length was greater than 6mm.

Ulnar variance was recorded. All wrists were assessed by computed tomography arthrography and magnetic resonance imaging studies to rule out any associated soft tissue abnormalities including ligamentous injuries. Pre- and postoperative pain levels were recorded using a pain scoring system.

**Results :** Patients were followed up for a mean period of 46 months. Before surgery, the mean styloid length was 10 mm and the ulnar styloid process index 0.32. The reported pain score was significantly reduced following surgery and all patients, except one, returned to pre-morbid levels of activity.

**Conclusions :** Oblique ulnar styloid osteotomy is an effective means of relieving impaction of the ulnar styloid whilst preserving the integrity of the intrinsic ulnar styloid ligaments.

**Type of Study / Level of Evidence :** Therapeutic Level IV