

# CASE SERIES

## *Brett Wiater, MD Performs Stemless TSA On Paramedic With Humeral Deformities*

### Surgeon

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### Patient

54-year-old male  
Prior Magnuson-Stack procedure in  
youth  
Proximal humeral fracture of right  
shoulder

### Implant

Catalyst CSR cemented humeral  
component; 3-Peg Glenoid component

### Catalyst Comment

Due to this patient's severe humeral deformities, the Catalyst CSR™ Total Shoulder System, with a stemless prosthesis using a multiplanar osteotomy, is the only viable option without extensive reconstruction.

### Patient History

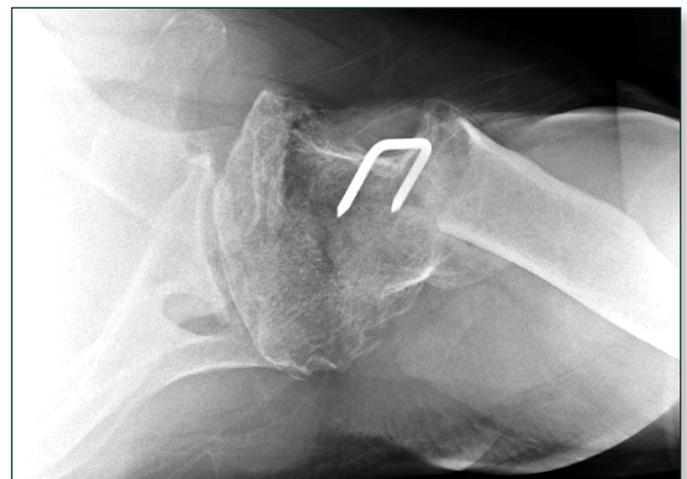
A 54-year-old, right-hand dominant male suffered a proximal humeral fracture working as a paramedic in December 2019. In his youth, this patient had undergone a Magnuson-Stack procedure to correct instability in his right shoulder. By the following spring, the patient's shoulder function had deteriorated significantly, to the point where he could not work. In May 2020, the patient elected to have a total shoulder arthroplasty (TSA) using a stemless, ellipsoid humeral component.



### Observations

The patient presented with osteoarthritis with a flattened humeral head. His Walch B3 glenoid was significantly eroded, with approximately 25° of retroversion.

His preoperative range-of-motion scores were 60° of forward extension (FE), 15° of external rotation (ER), internal rotation (IR) to the belt line, and abduction of 40°.



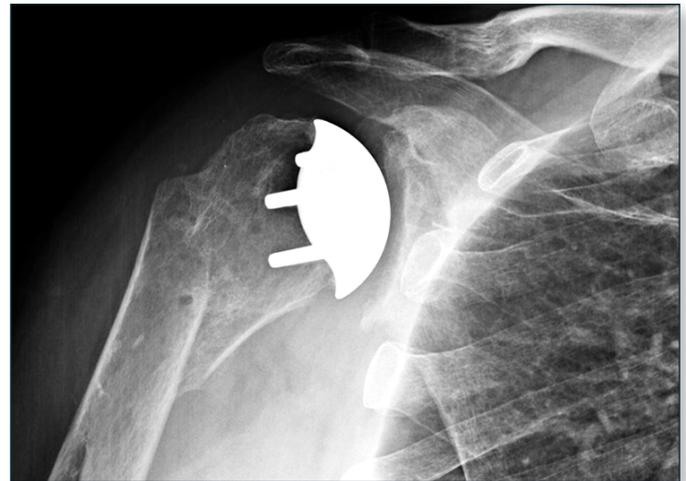
*Preoperative images*

## Procedure

Dr. Wiater performed a TSA using the Catalyst CSR™ Total Shoulder System. He used a tenotomy for the subscapularis repair.

Due to the very large humeral deformity, Dr. Wiater believed the Catalyst CSR system was the best option for this case due to the stemless humeral component and the bone-sparing multiplanar osteotomy technique.

“With the patient’s humeral deformity, a stemmed humeral prosthesis would have been impossible,” said Dr. Wiater. “Additionally, with the location of the deformity, a regular neck cut that is used with any other system would not have worked. We were fortunate to have the Catalyst CSR system for this patient.”



Post operative images

## Outcome

The patient has done extremely well and returned back to work as a paramedic three months post operatively.

At his three-month post op follow up, the patient’s range-of-motion scores were significantly improved, with 140° of FE, 45° of ER, and internal rotation (IR) to T12.

## Patient At Three Months Post Op

