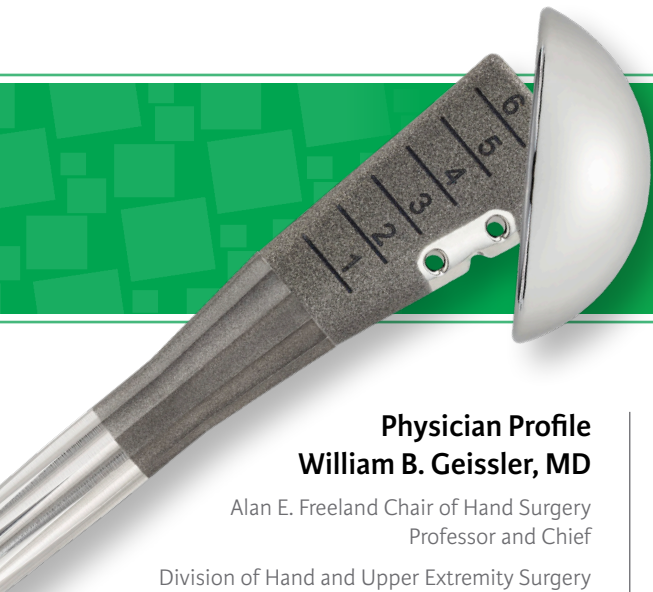


# Integra®

Hemiarthroplasty

INTEGRA®  
LIMIT UNCERTAINTY



## Physician Profile William B. Geissler, MD

Alan E. Freeland Chair of Hand Surgery  
Professor and Chief

Division of Hand and Upper Extremity Surgery

Chief Section of Arthroscopic  
Surgery and Sports Medicine

Fellowship Director-  
Hand and Upper Extremity Fellowship

Department of Orthopaedic Surgery  
University of Mississippi Medical Center

### Board Certification:

Orthopaedic Surgery, Certificate of Added  
Qualification in Hand Surgery

### Medical School:

Tulane University  
New Orleans, LA

### Residency:

University of Mississippi Medical Center  
Jackson, MS

### Fellowship:

Advanced Arthroscopic Surgery and Sports Medicine,  
Richmond, VA

### Fellowship:

Hand and Upper Extremity Surgery  
University of Mississippi Medical Center  
Jackson, MS

## Hemiarthroplasty with Latarjet for Chronic Shoulder Dislocation Secondary to Seizures

*Uncontrolled seizures can be a difficult orthopaedic problem. In the shoulder, it can result in comminuted fractures of the proximal humerus or instability with bone loss of the glenoid and/or humerus.*

### Patient Profile/History

The patient is a 46 year old male with uncontrolled seizures. He presents with a chronic dislocation to his left shoulder by his history of approximately one year duration. He's had attempted closed reduction in the emergency room with no success. In addition, he relays a history that he was brought to surgery under general anesthesia and underwent an attempt at closed reduction with a shoulder reduced and immediately dislocated under anesthesia at another institution. The patient presents with severe pain and limitation of motion. He has minimal active flexion, and virtually no interior or external rotation. Radiographs show an anterior inferior dislocation of the shoulder. On the axillary review, it shows a large Hill-Sachs deformity.

### Surgical Treatment

The patient was brought to surgery and the standard deltopectoral approach was made. On examination of the humeral head, the patient had a loss of three-fourths of his humeral head secondary to impaction from the chronic dislocation of the shoulder. The patient also had extensive bone loss of the anterior glenoid. An initial option was a Latarjet procedure, which is transfer of the coracoid process into the bony defect. However, due to repeated seizures, the patient had a fracture nonunion of the coracoid which was not big enough to consider any type of transfer. At that point, the decision was to use the patient's humeral head as bone graft to support the glenoid deficiency. The humeral head was cut and utilized to support the deficient glenoid. A Integra® Titan™ Press-Fit Hemiarthroplasty was placed. In this instance, slight increase in retroversion was used at approximately 40 degrees, with the patient's history of chronic dislocation to the shoulder in an attempt to provide greater anterior mobility.

Based on the patient's history of uncontrolled seizures, the reverse shoulder was not indicated due to high risk of dislocation of the prosthesis.

### Pre-Op and Post-Op Radiograph/MRI/CT Images and Surgical Pictures

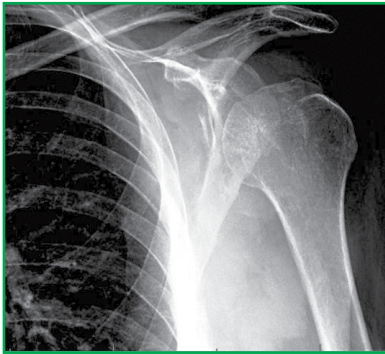


Figure 1 – Anterior radiograph demonstrated an anterior/inferior chronic dislocation of the shoulder.

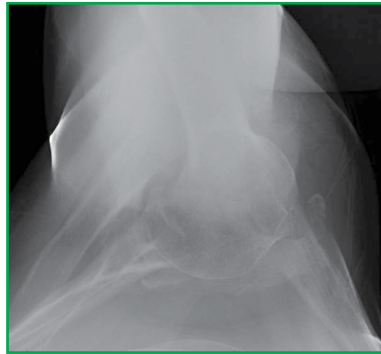


Figure 2 – Axillary view demonstrating an anterior dislocation of the shoulder with a large Hill-Sachs deformity.

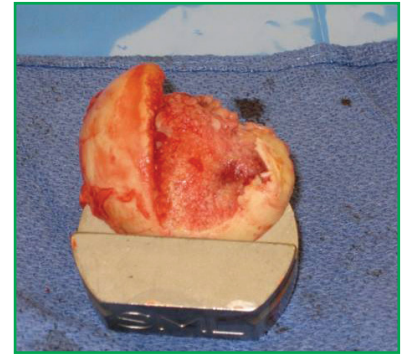


Figure 3 – A photograph of a humeral head showing loss of approximately 3/4 of the articular surface secondary to the chronic dislocation.

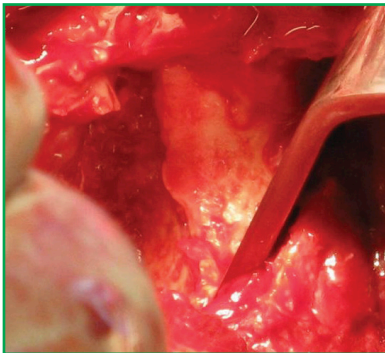


Figure 4 – Radiograph showing a loss of approximately 1/3 of the glenoid secondary to the chronic dislocation. Note the scalloping of the anterior glenoid neck to conform to the patient's humeral head.

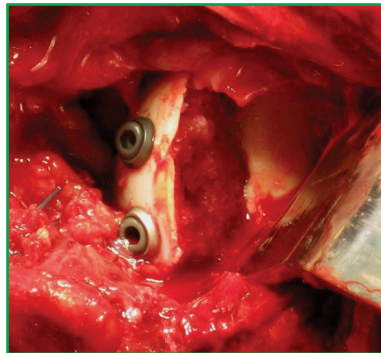


Figure 5 – Intra-operative photograph showing the humeral head being utilized to replace the bone stock of the glenoid and help improve stability in this active seizure patient.

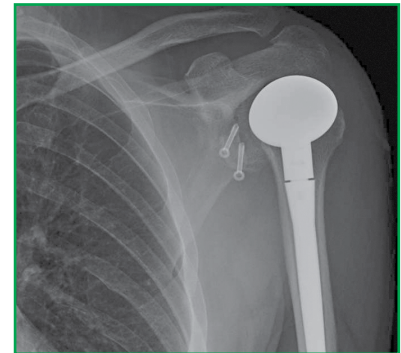


Figure 6 – Approximately six months postoperative radiograph shows the head reduced and no signs of recurrent dislocation. Following the surgery, the patient had multiple seizures.

### Physician Conclusion

The patient presents with a rather unusual problem of a chronic anterior dislocation of the shoulder with marked bone loss of both the humeral head and the glenoid. In this instance, the remaining portion of humeral head was used to restore the bone loss of the glenoid. An Integra Titan Press-Fit Hemiarthroplasty was used with increased retroversion for stability. Post-operatively, the patient has undergone a physical therapy program. At the last available follow-up, his active flexion was 120 degrees and the shoulder has remained reduced with minimal pain. He is extremely pleased with his Titan Shoulder. He has had multiple post-operative seizures with no recurrent dislocation to his operative shoulder. In the future, if the patient's seizures are well-controlled, he may be a candidate for glenoid replacement or conversion to reversal arthroplasty if his instability reoccurs. By utilizing the modular Titan system, the patient can be easily converted to a reverse shoulder arthroplasty by removing the body and replacing it with a reverse body. At this point, however, the patient is quite happy with increased range of motion, function and no signs of recurrent instability.

As the manufacturer of this device, Integra does not practice medicine and does not recommend this or any other surgical technique for use on a specific patient. The surgeon who performs any implant procedure is responsible for determining and using the appropriate techniques for implanting the device in each patient.

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USA 800-654-2873 • 888-980-7742 fax

International +1 609-936-5400 • +1 609-750-4259 fax

[integralife.com/contact](http://integralife.com/contact)

**Manufacturer:**



Ascension Orthopedics, Inc.  
8700 Cameron Road, Suite 100  
Austin, Texas 78754 • USA