

Tips & tricks per esporre la glena e impiantare correttamente la componente glenoidea

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Title: GLENOID EXPOSURE IN TOTAL SHOULDER ARTHROPLASTY

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Key Steps to Glenoid Exposure in Total Shoulder Arthroplasty

John Sperling, MD, MBA, Jason Hurst, MD, Quin Throckmorton, MD, Timothy Codd, MD

Glenoid Exposure

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Glenoid Exposure

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Glenoid Exposure for Total Shoulder Arthroplasty

SCOTT STEINMANN MD
MAYO CLINIC

Seminars in Arthroplasty

Glenoid Exposure: Tricks of the Trade

Tedd C. Moen, MD, and Louis U. Bigliani, MD

Available online at www.sciencedirect.com
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Top ten tips for glenoid exposure in shoulder arthroplasty

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Seminars in Arthroplasty

Glenoid Exposure: Tricks of the Trade

Benjamin Szerlip, DO,* Stephanie Muh, MD,[†] Jonathan J. Streit, MD,[‡] and Reuben Gobeze, MD[†]

REVIEW ARTICLE

Glenoid Exposure in Shoulder Arthroplasty

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3 – Glenoid exposure on a deltopectoral approach

3.1- Patient positioning

3.2 – Skin incision and exposure of the superior extremity of the humerus.

3.3 – Arthrotomy – subscapularis procedures

3.4 – Inferior release: inferior capsulotomy



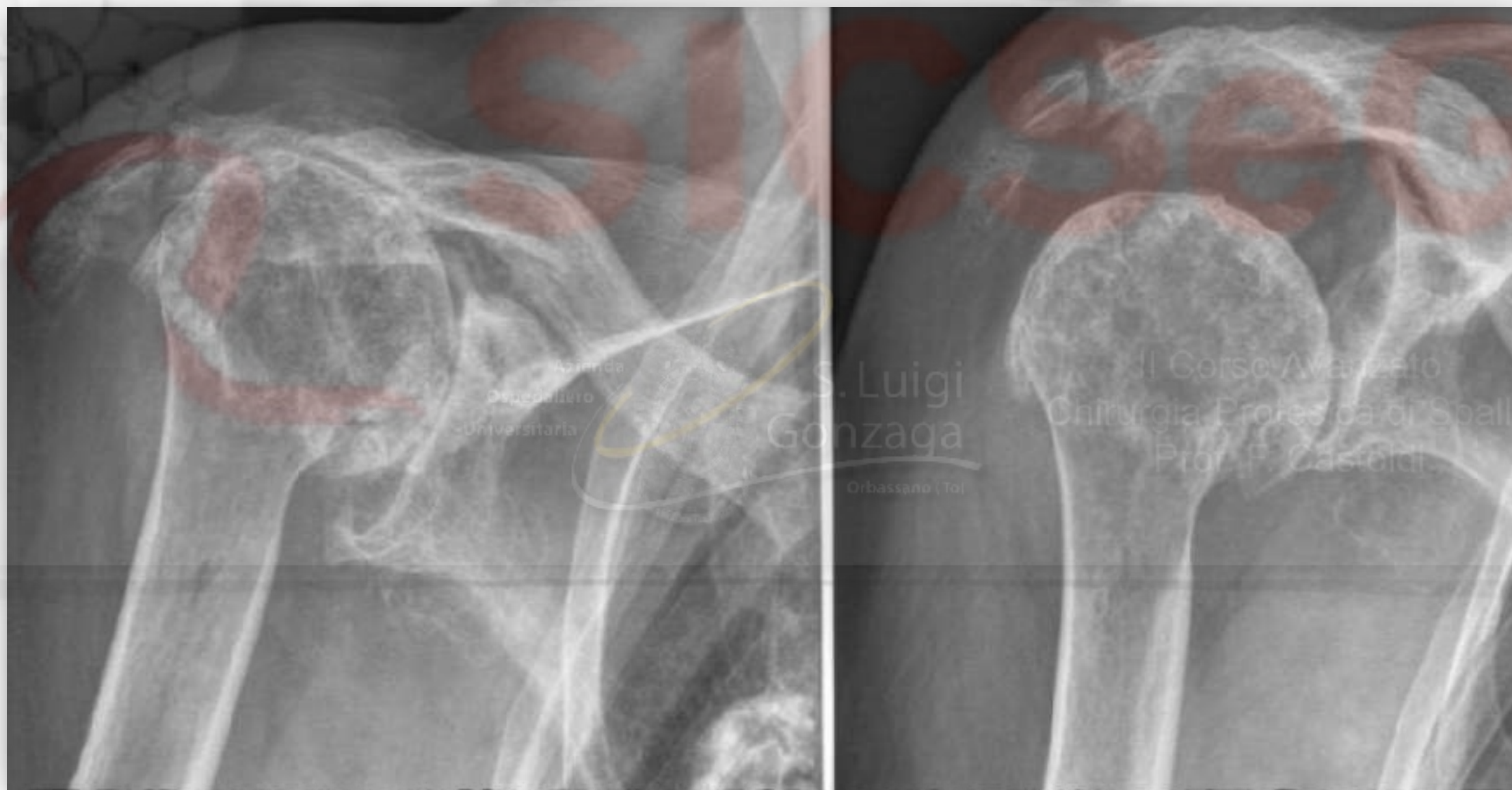
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Glenoid bone anatomy considerations:

Normal: small vault volume

Arthritis: further bone loss

Eccentric Wear:

- Retraction difficult
- Implantation challenging

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Glenoid Deficiency

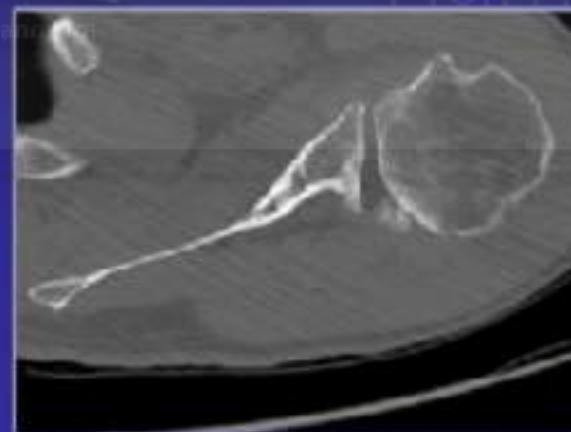
MRI or CT Scan

- Glenoid
 - Retroversion
 - Depth of Vault
 - Wear

- Humerus
 - Wear
 - Version
 - Subluxation

- Fatty Infiltration
 - Muscle bellies

- RC Tears



Key Steps to Glenoid Exposure

in Total Shoulder Arthroplasty

John Sperling, MD, MBA Jason Hurst, MD Quin Throckmorton, MD Timothy Codd, MD



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Deltoid Mobilization

To start, ensure the deltoid is fully mobilized proximally, and the subacromial space is cleared of any scar tissue between the deltoid and underlying rotator cuff.

The deltoid should be mobilized in the mid-aspect and distally. Special attention should be made to identify the axillary nerve on the undersurface of the deltoid.



Glenoid Exposure for Total Shoulder Arthroplasty

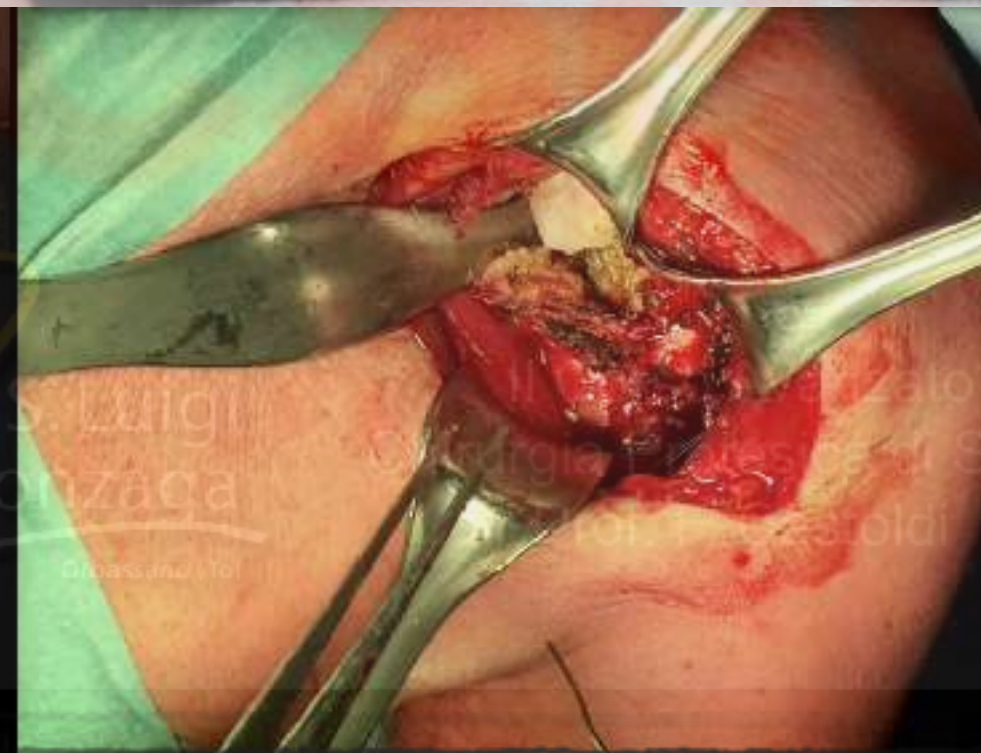
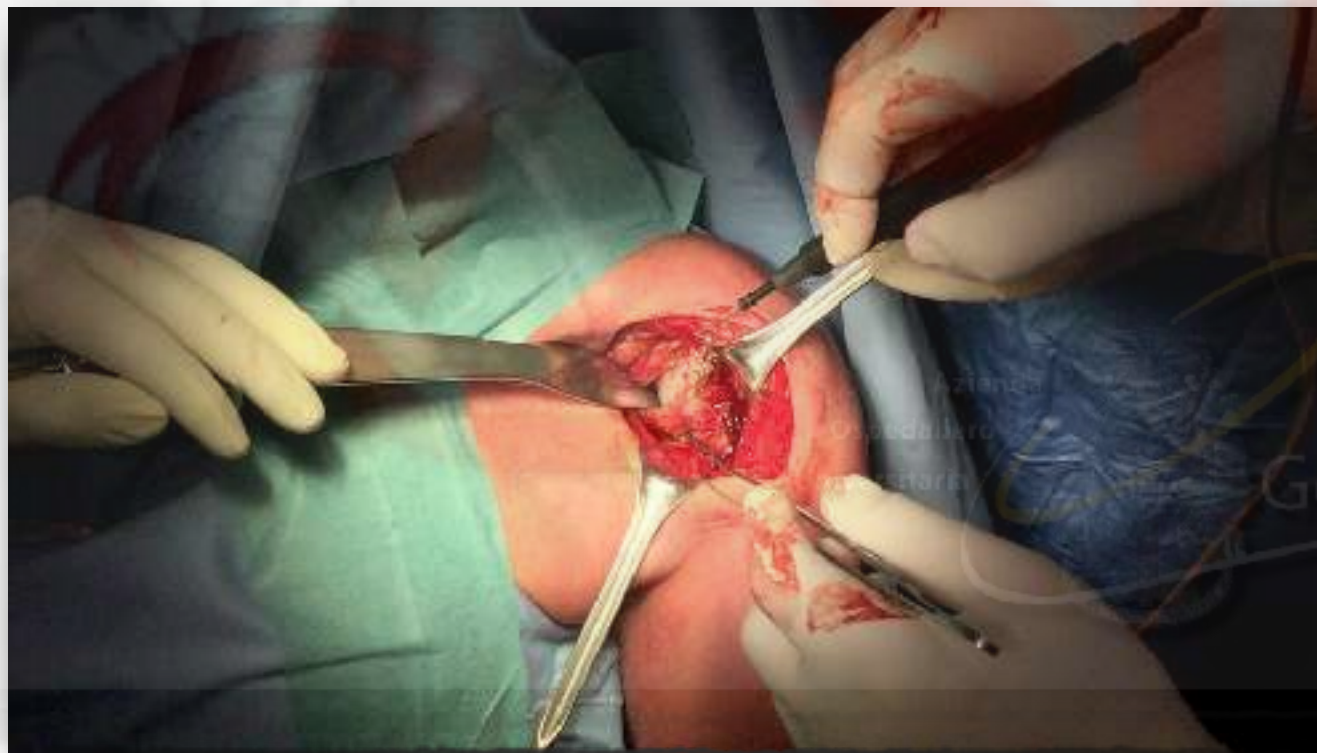
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Identificare la vena cefalica e seguirla per tutto il decorso, fino alla clavicola e inferiormente sino all'inserzione del deltoide

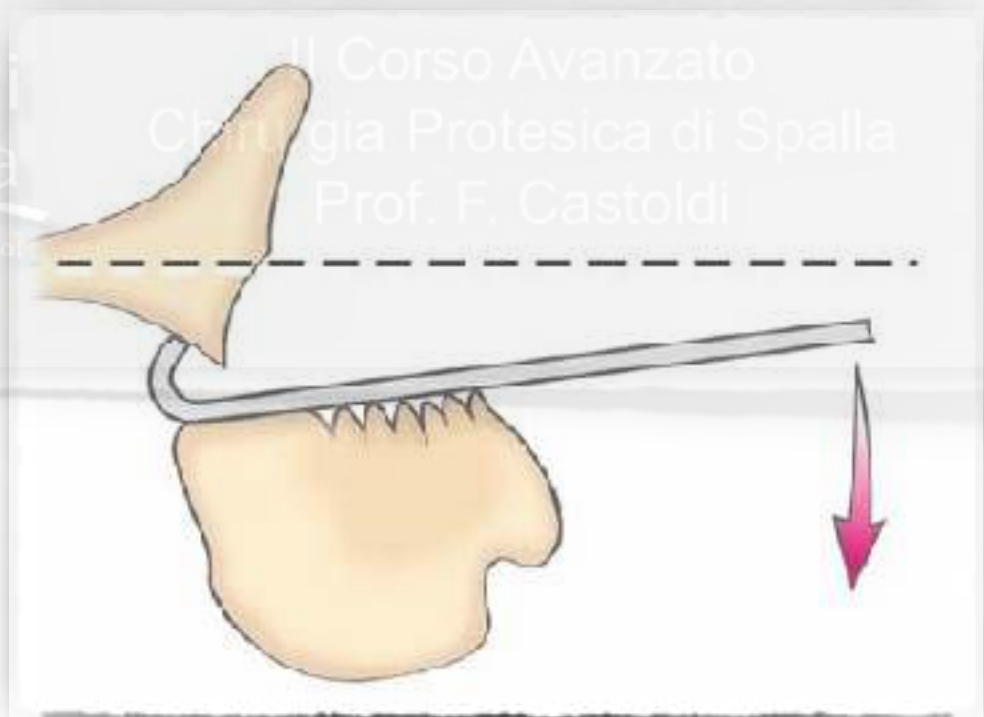
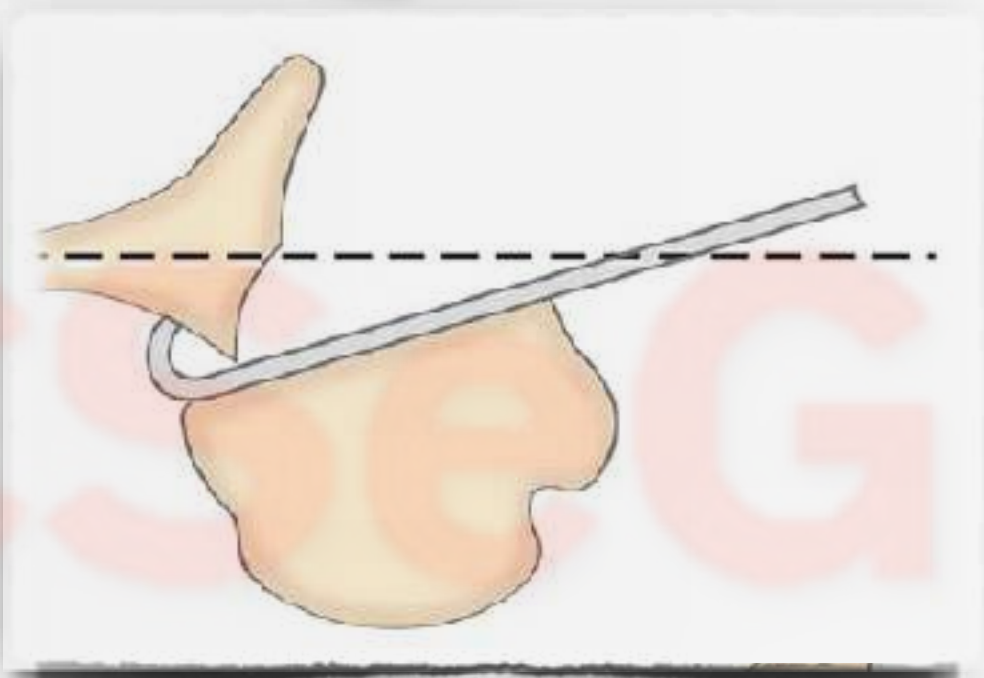
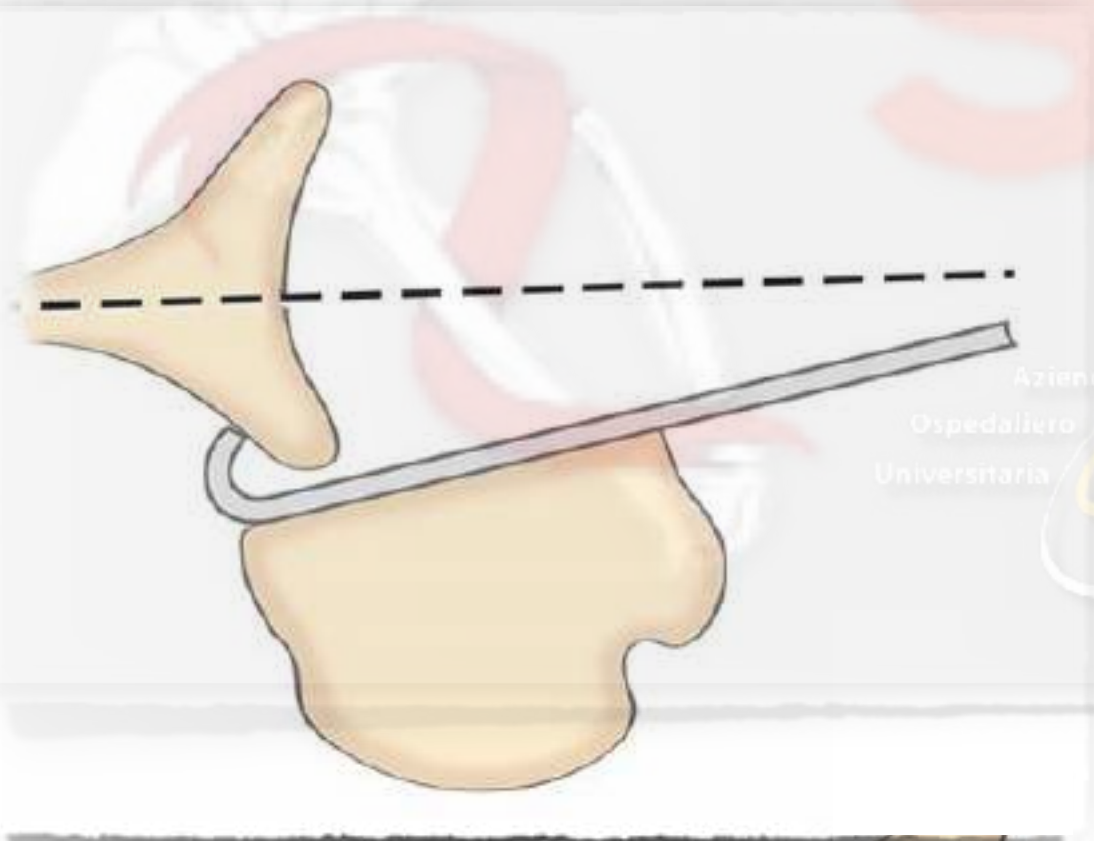
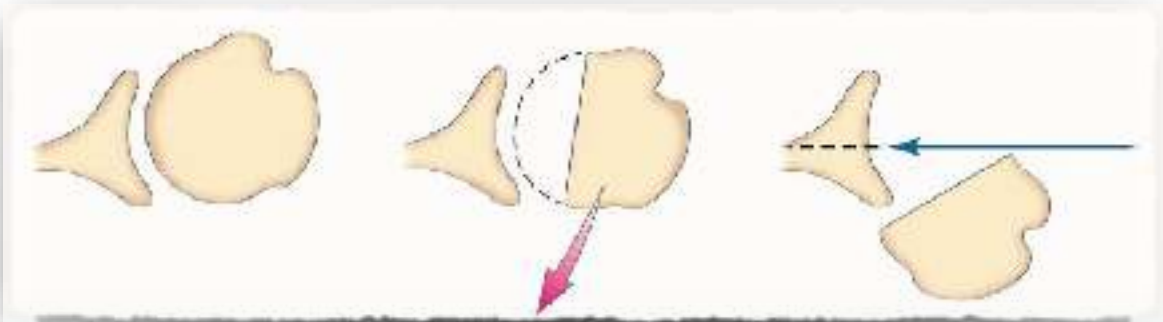
Glenoid Exposure for Total Shoulder Arthroplasty

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Staccare la capsula articolare dal margine mediale dell'omero, dopo aver fatto la resezione degli osteiti





Frattura Benigna?

Glenoid Exposure: Tricks of the Trade

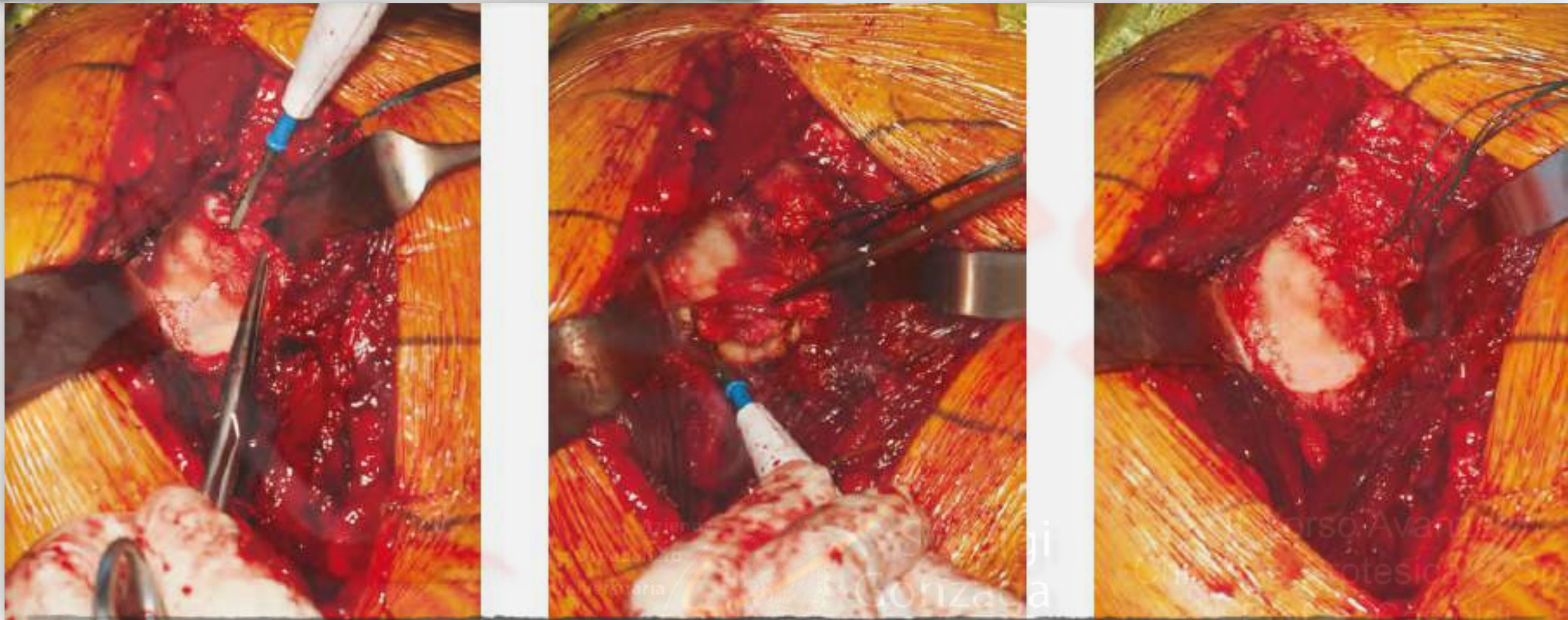
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Positioning for glenoid preparation in abduction, extension, and external rotation.

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Subscapularis Division and Glenohumeral Joint Exposure

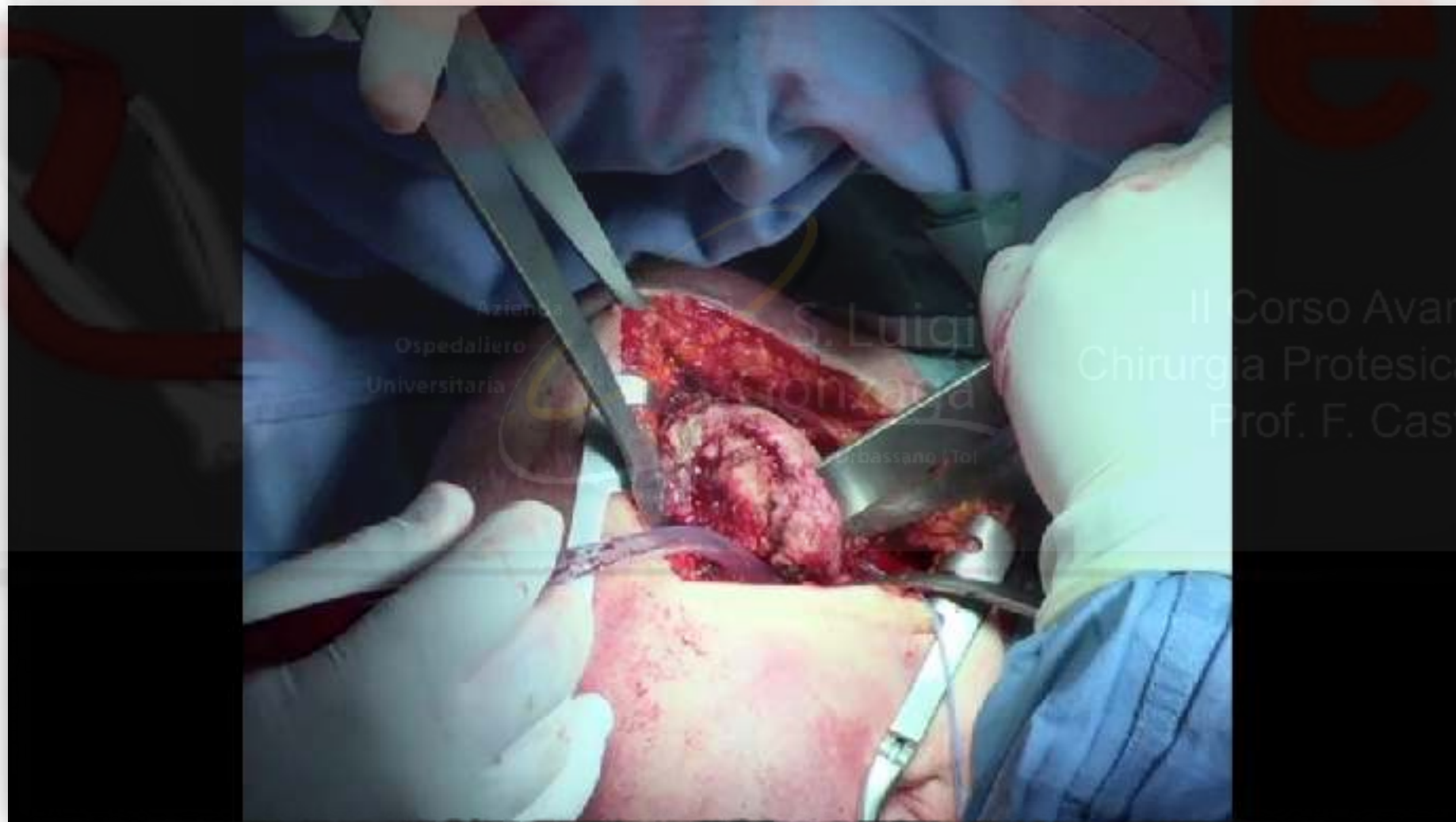
The arm is then externally rotated, which increases the distance between the axillary nerve and the subscapularis, and adducted, which puts the subscapularis on a stretch, so that the anterior circumflex humeral artery and its venae comitantes “3 sisters” can be located at the inferior border of the muscle

Glenoid Exposure: Tricks of the Trade

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Humeral side preparation

Proper preparation of the humerus is critical to achieving exposure of the glenoid. **The key principles** of humeral preparation as it relates to glenoid exposure are **adequate removal of humeral osteophytes**, and **adequate resection of the humeral head** with the humeral cut. It is critical to remove all anterior and inferior osteophytes, as this allows for identification of the true anatomic neck of the humerus

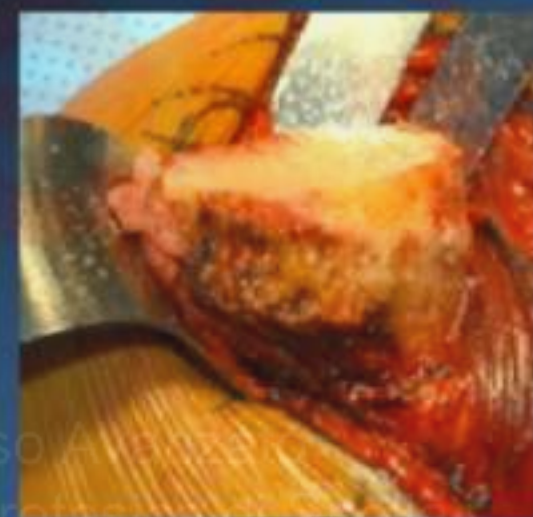


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Head "Reduction"



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Soft Tissue Release

- A "720 degree release"
- Release all the soft tissue and then go back and release it again!



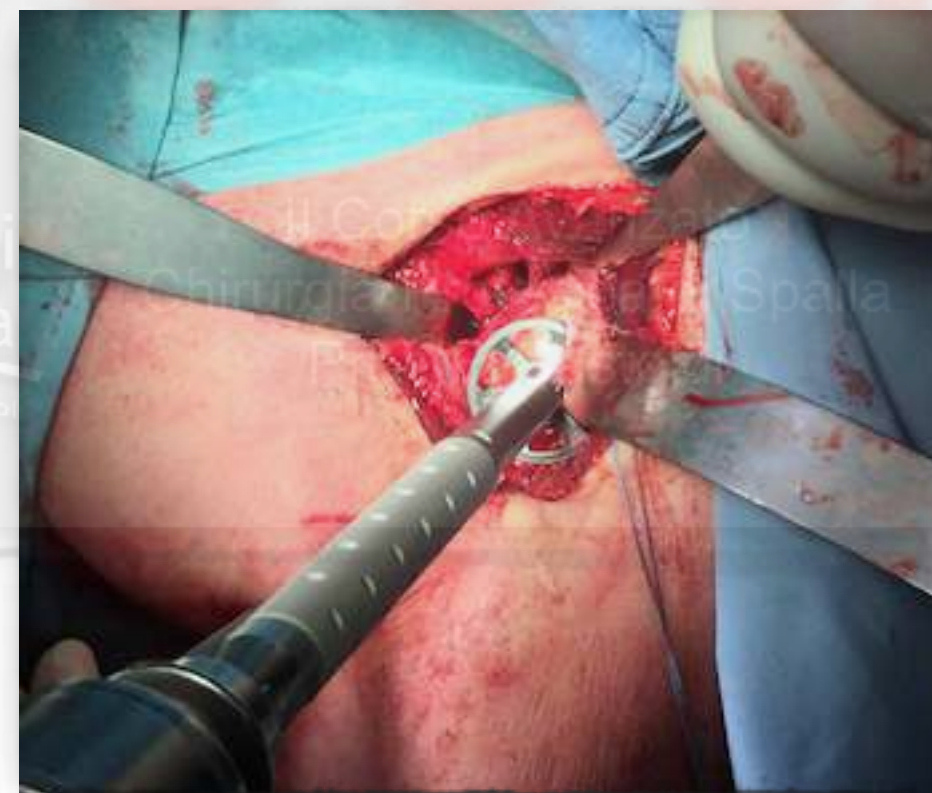
Soft Tissue Release

- Adequate amount of bone has to be resected off the humerus



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Clever instrumentation!

Ten golden tips

These are, in ascending order of importance:

10) tilting the operating table away from the surgical side

09) having a variety of retractors available

08) removing all humeral osteophytes

07) making an accurate humeral cut

06) achieving optimal humeral positioning

05) ensuring proper retractor placement

04) utilizing a laminar spreader in select situations

03) achieving adequate capsular release on the humeral side

02) excising the antero-inferior capsule from the glenoid

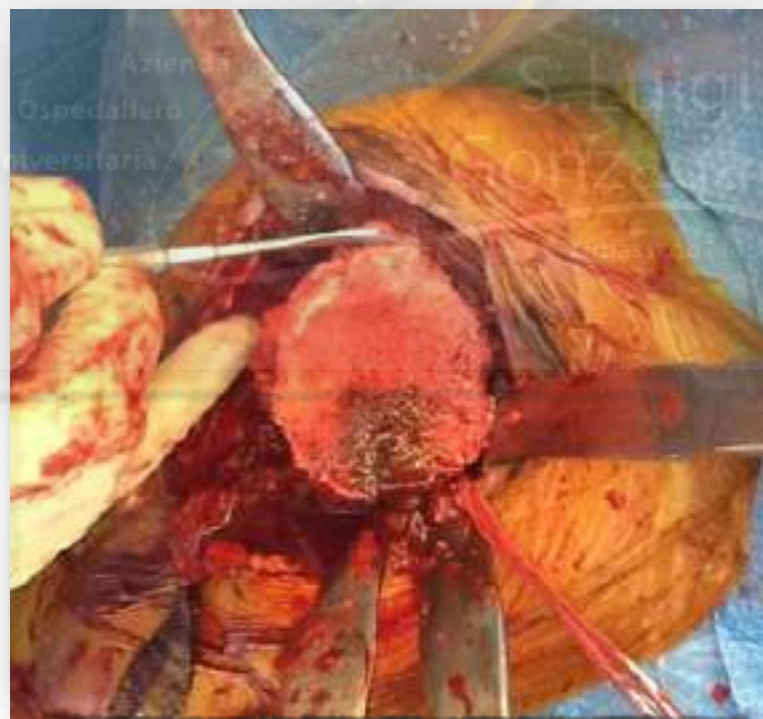
01) releasing the postero-inferior capsule from the glenoid



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Glenoid Exposure

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Conclusion

- Soft tissue release is the key to successful shoulder arthroplasty
- Good glenoid exposure cannot be obtained without releasing all of the capsule and lysis of all adhesions about the shoulder
- If good glenoid exposure cannot be obtained, you are better off doing a hemiarthroplasty



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Grazie

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