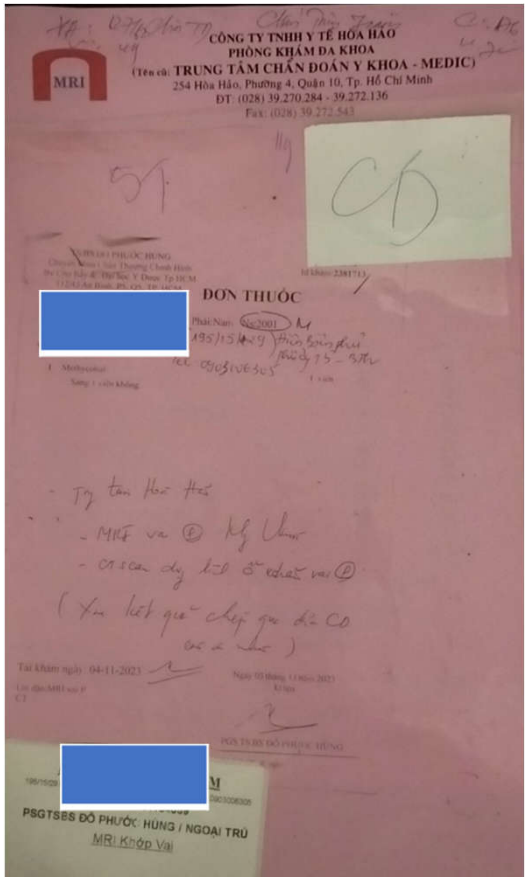
Pigmented Villonodular Synovitis of the Glenohumeral Joint and Biceps Tendon Sheath

BS MÃ NGUYỄN MINH TÙNG
PK KHỚP- MRI- TT Y KHOA MEDIC HÒA HẢO



MEDIC
www.medic.com.vn

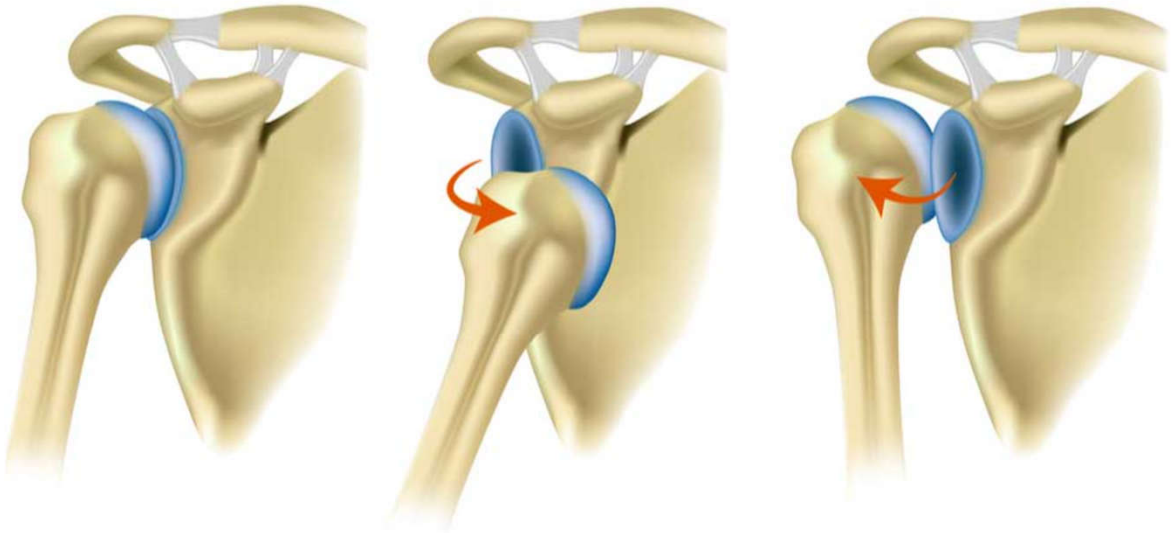
BN NAM, 22 TUỔI

TS: CHẤN THƯƠNG TRẬT KHỚP VAI PHẢI CÁCH 7 NĂM

BỆNH SỬ:

HAY TRẬT KHỚP VAI NHIỀU LẦN, TỰ NẮN GẦN ĐÂY ĐAU VAI NHIỀU HƠN → KHÁM PGS ĐỖ PHƯỚC HÙNG→ MEDIC CHỤP MRI VÀ CT VAI PHẢI, KHÔNG CE.

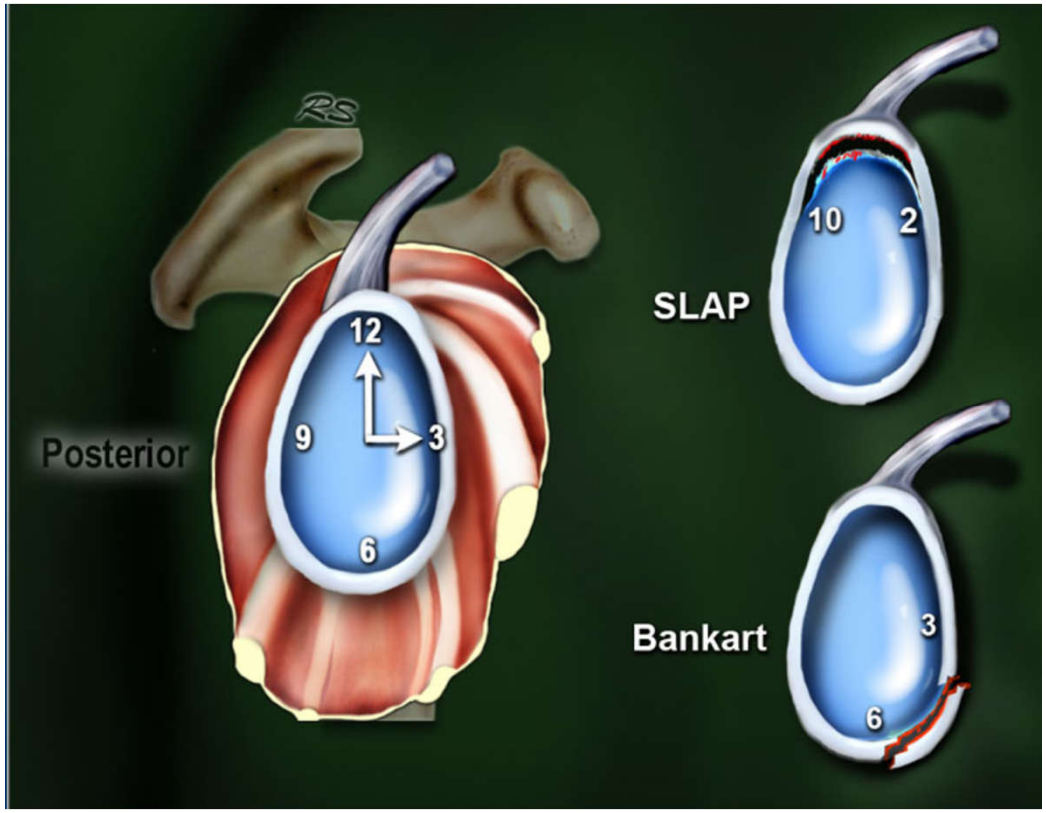
CHẨN ĐOÁN: TRẬT KHỚP VAI PHẢI TÁI HỒI.

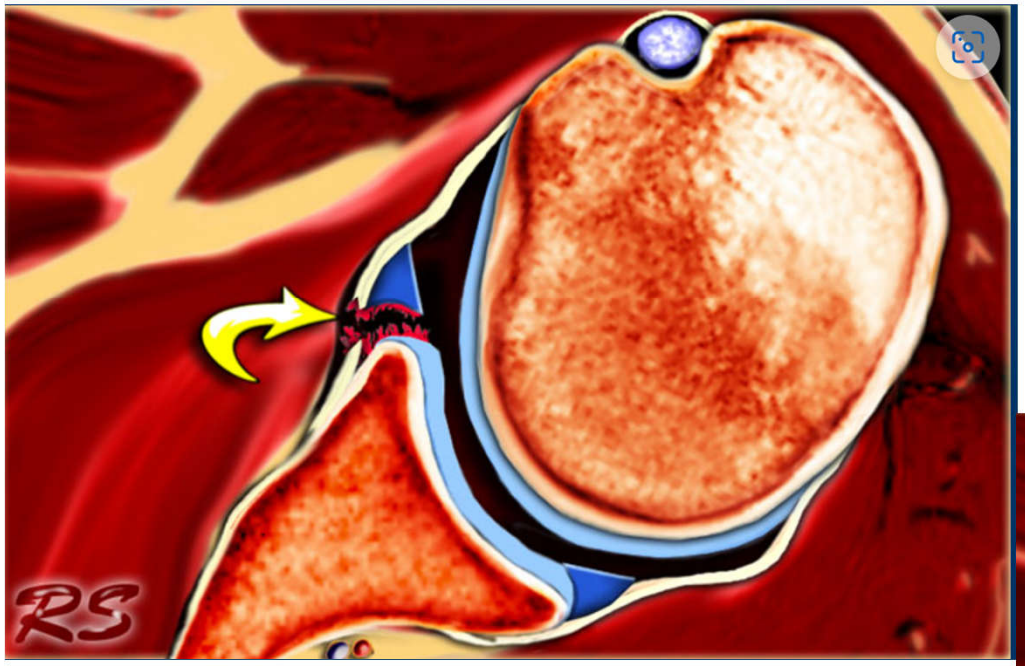


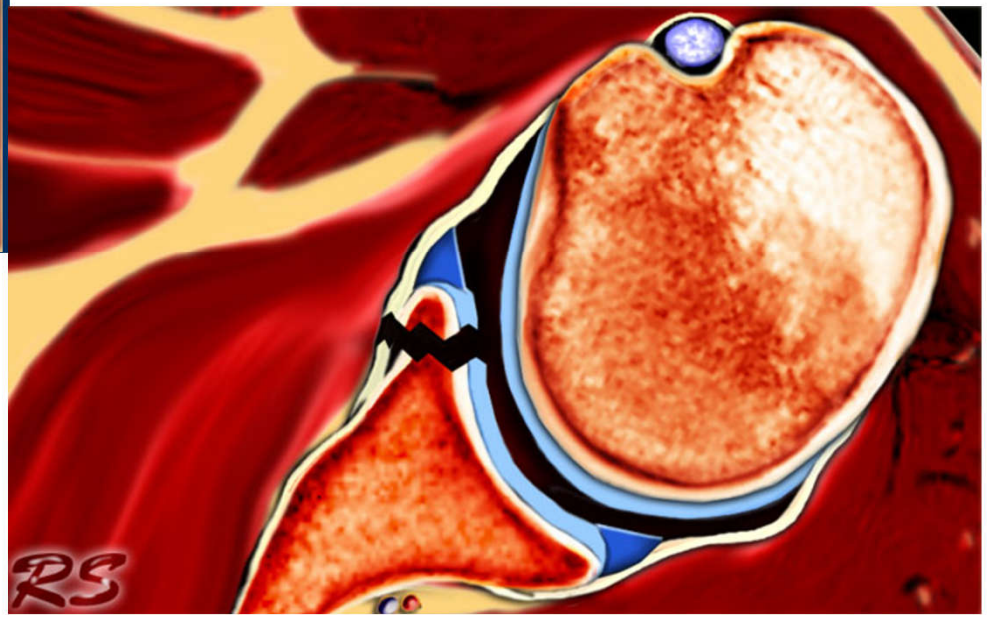
Normal anatomy

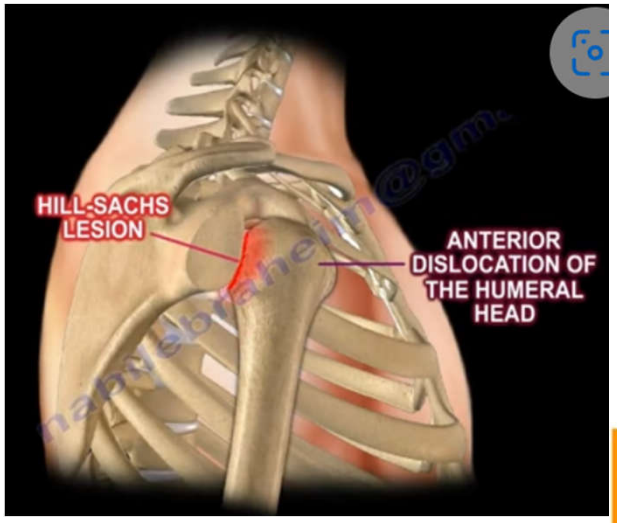
Anterior dislocation

Posterior dislocation





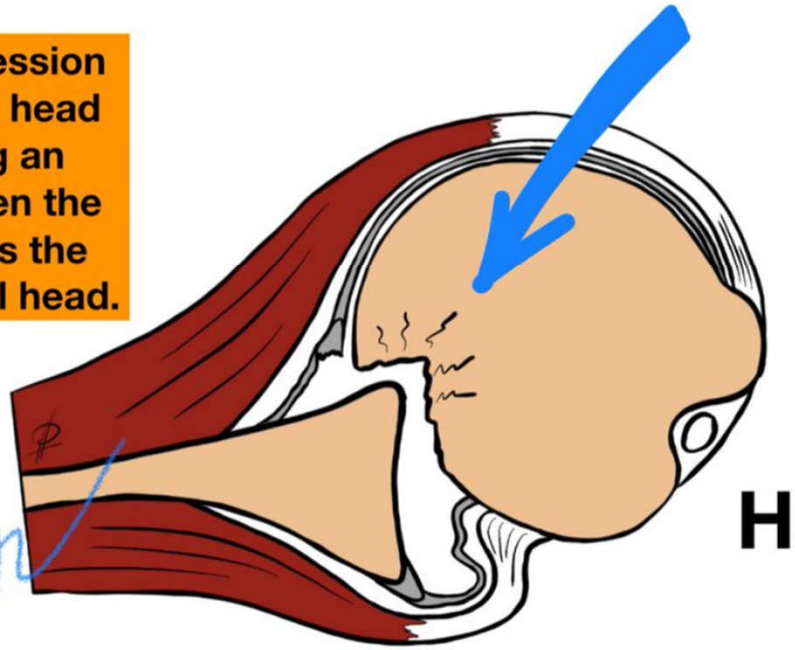




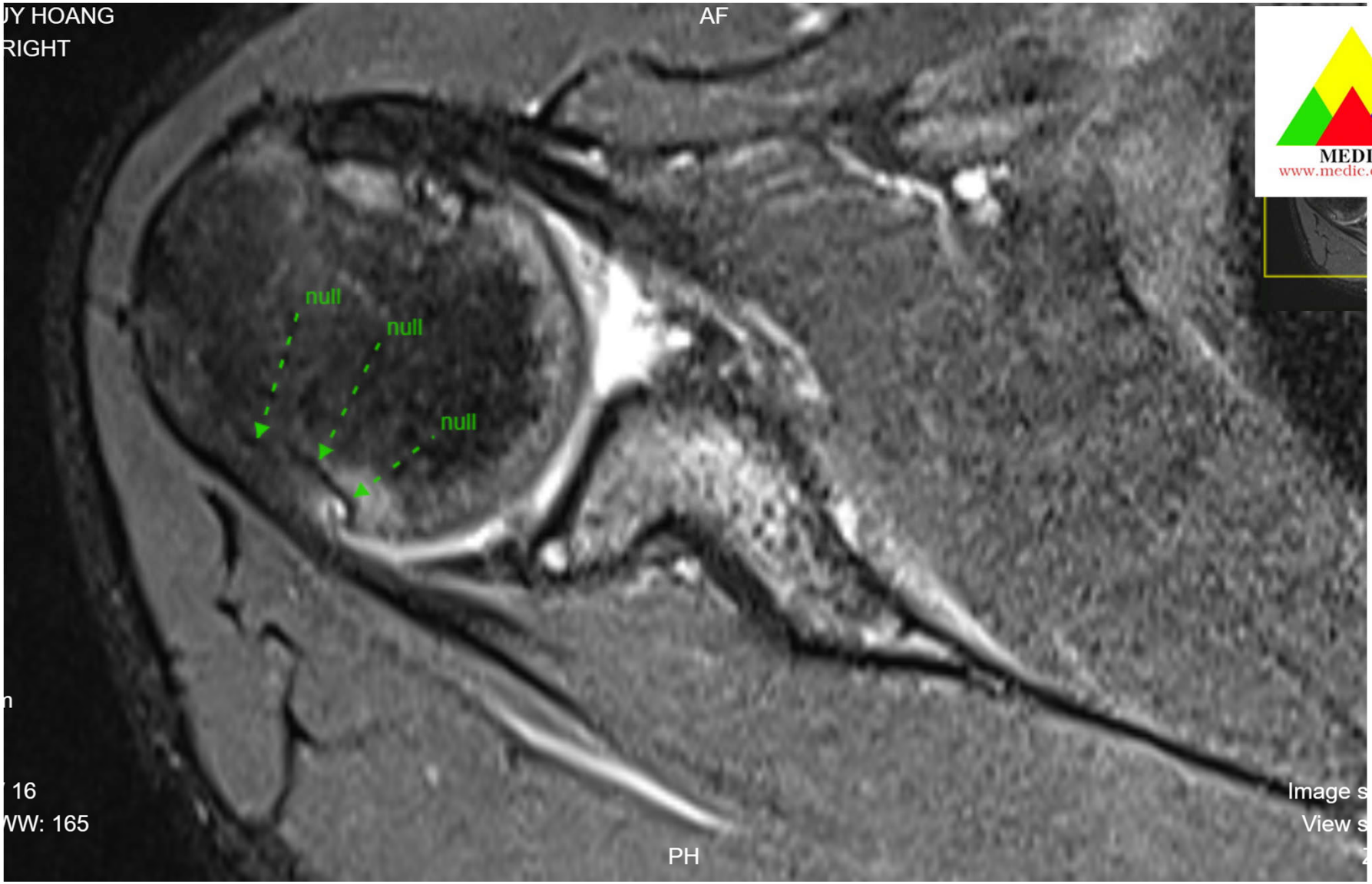
MEDIC
www.medic.com.vn

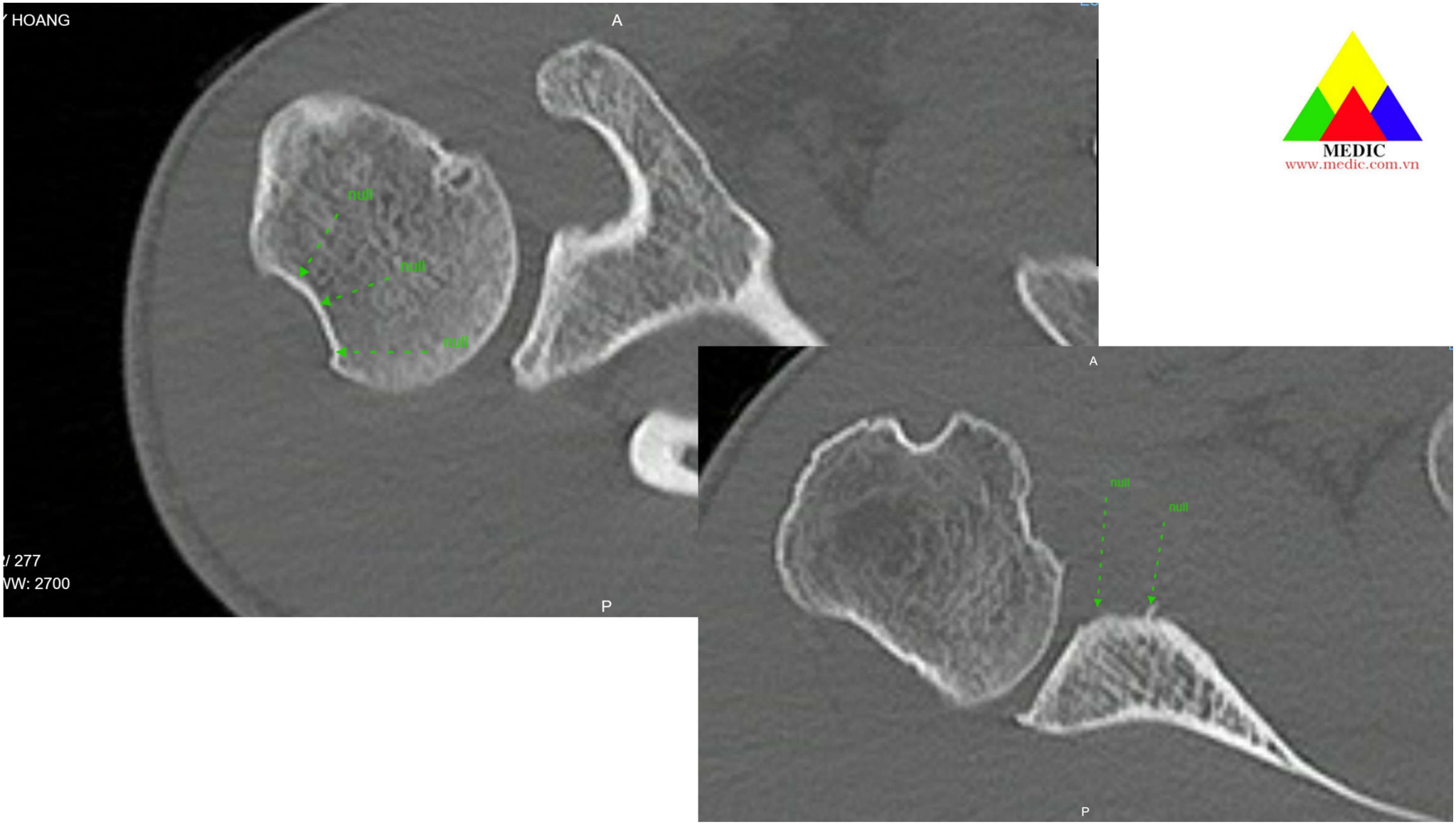
Hill-Sachs lesion

Posterior lateral compression fracture on the humeral head which happens during an anterior dislocation when the glenoid anterior rim hits the posterior part of humeral head.

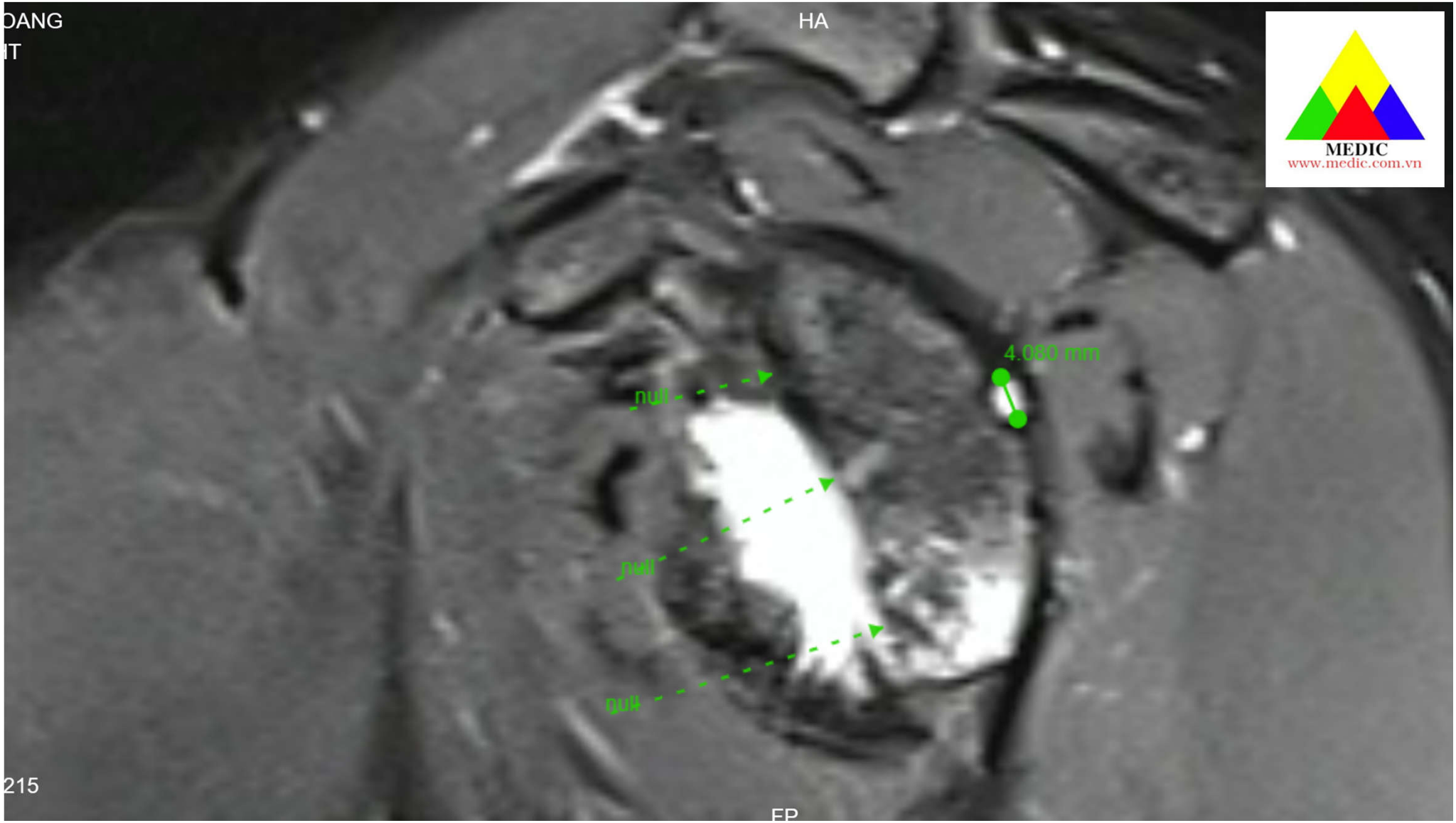


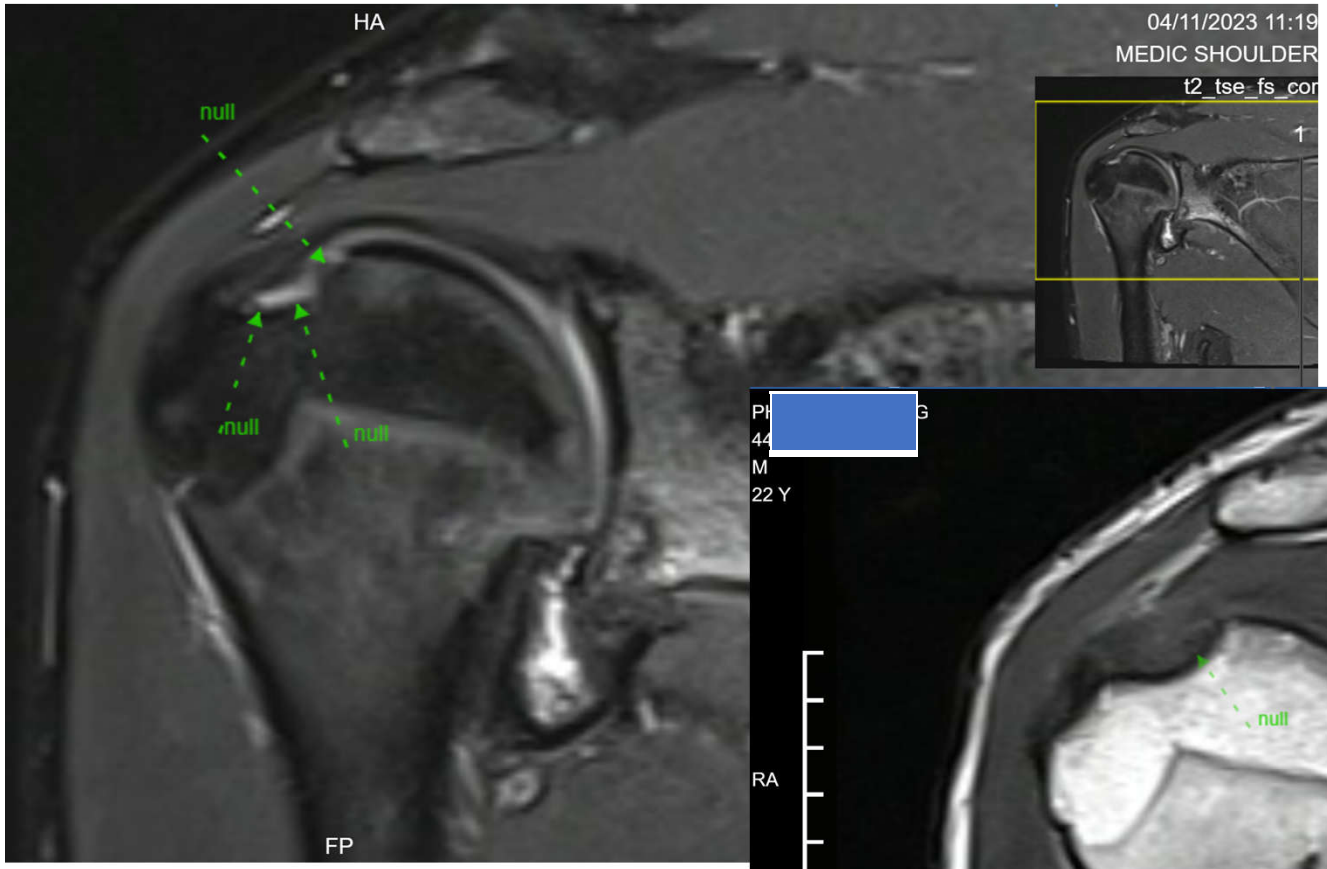
HSL


JY HOANG
RIGHT
AF
null
null
null
MEDIC
www.medic.com.vn
n
16
WW: 165
PH
Image s
View s

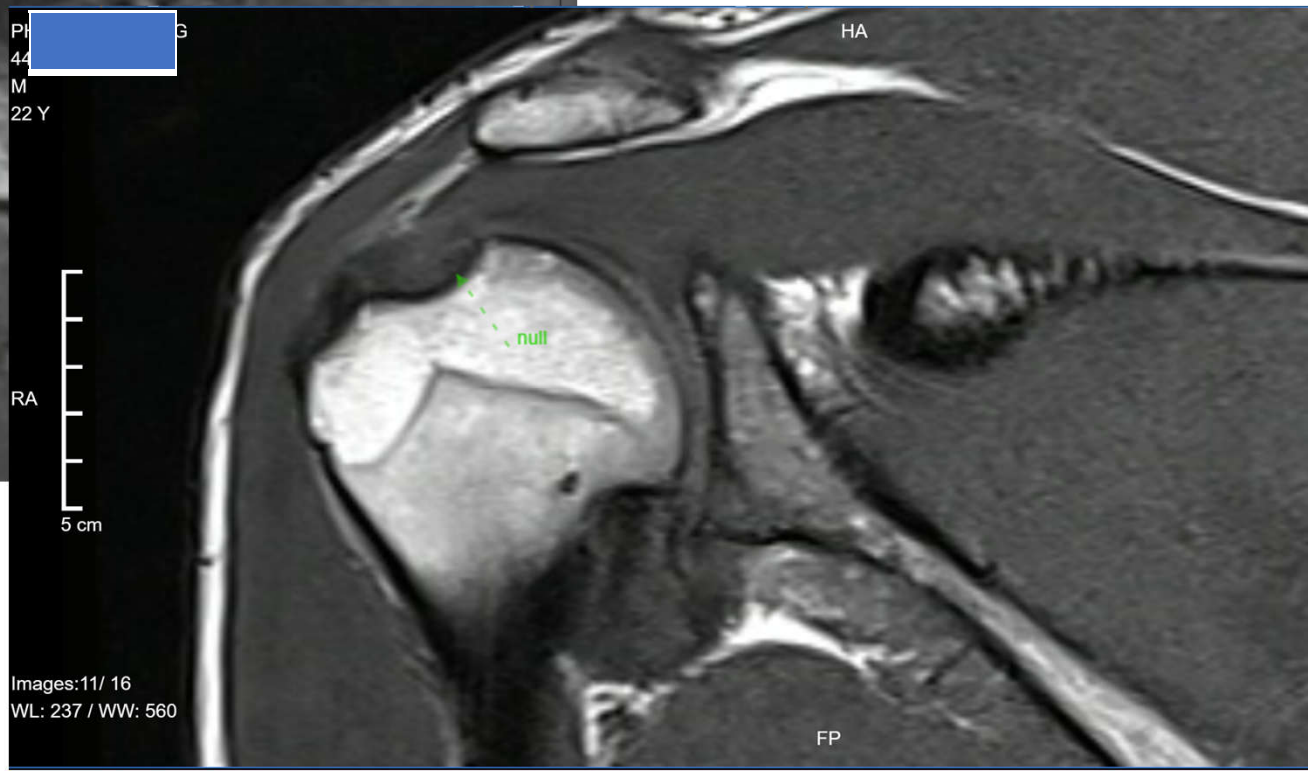


MEDIC
www.medic.com.vn

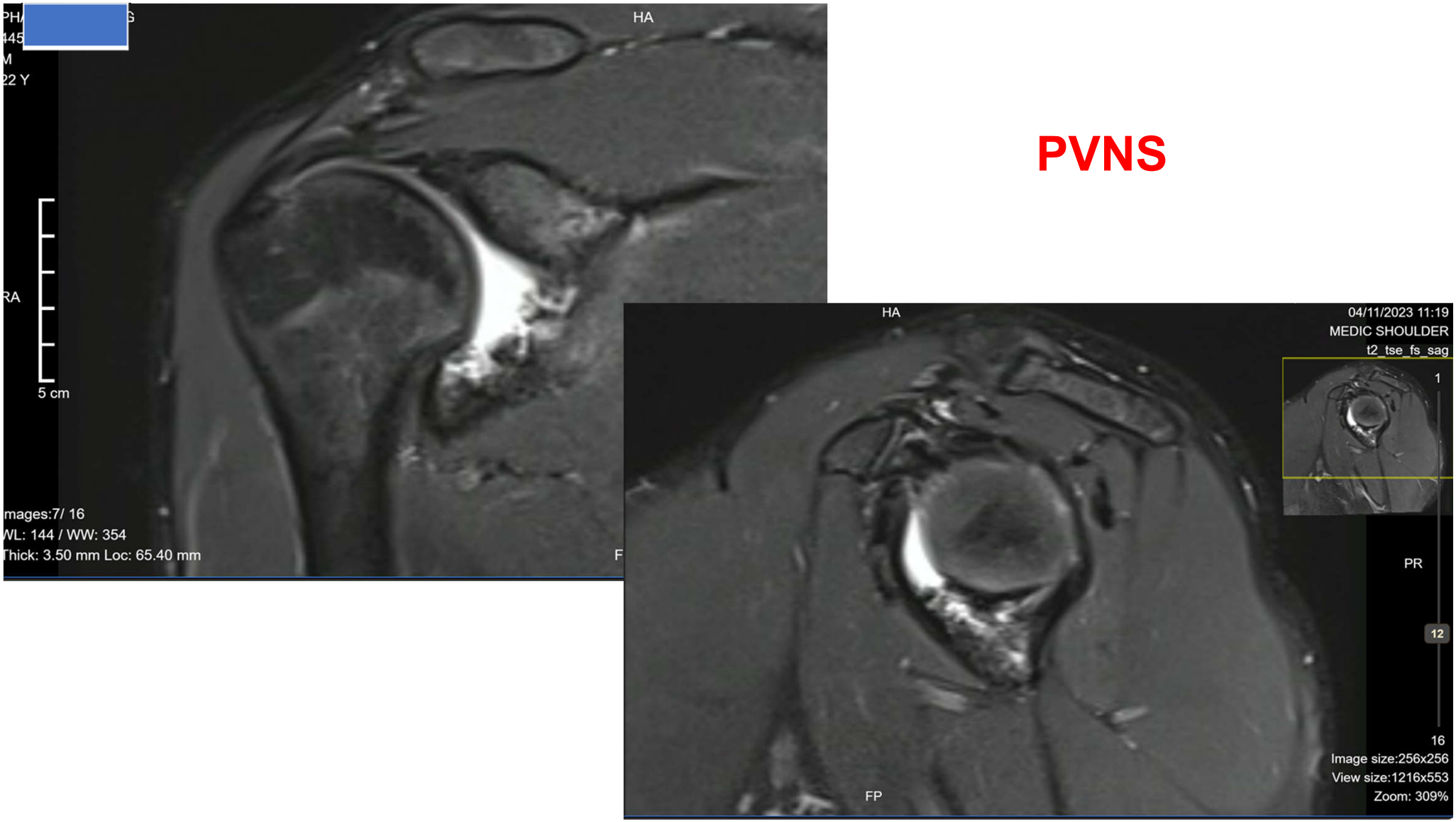

OANG
IT
HA
4.080 mm
null
null
null
215
FP
MEDIC
www.medic.com.vn

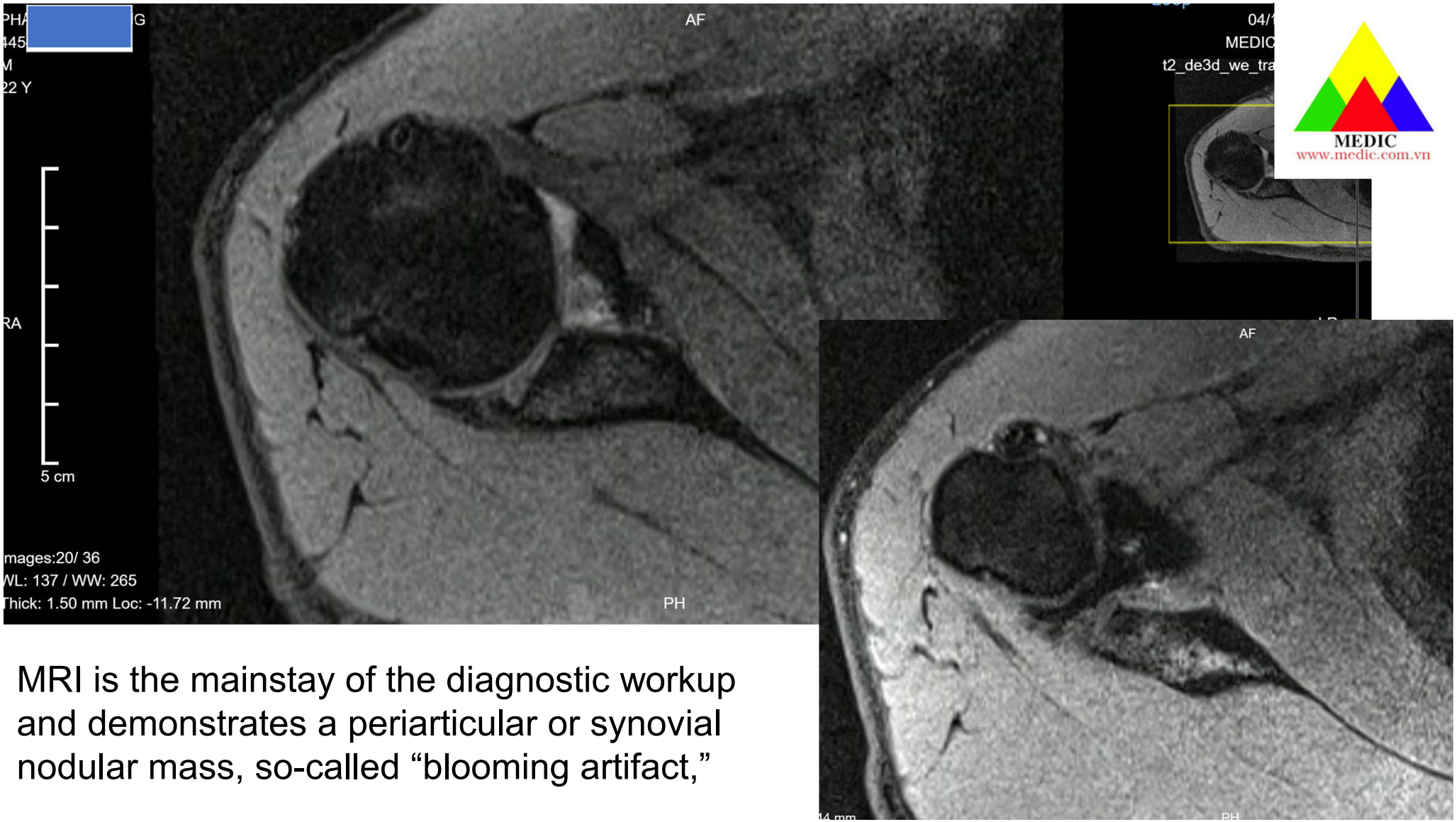


MEDIC
www.medic.com.vn

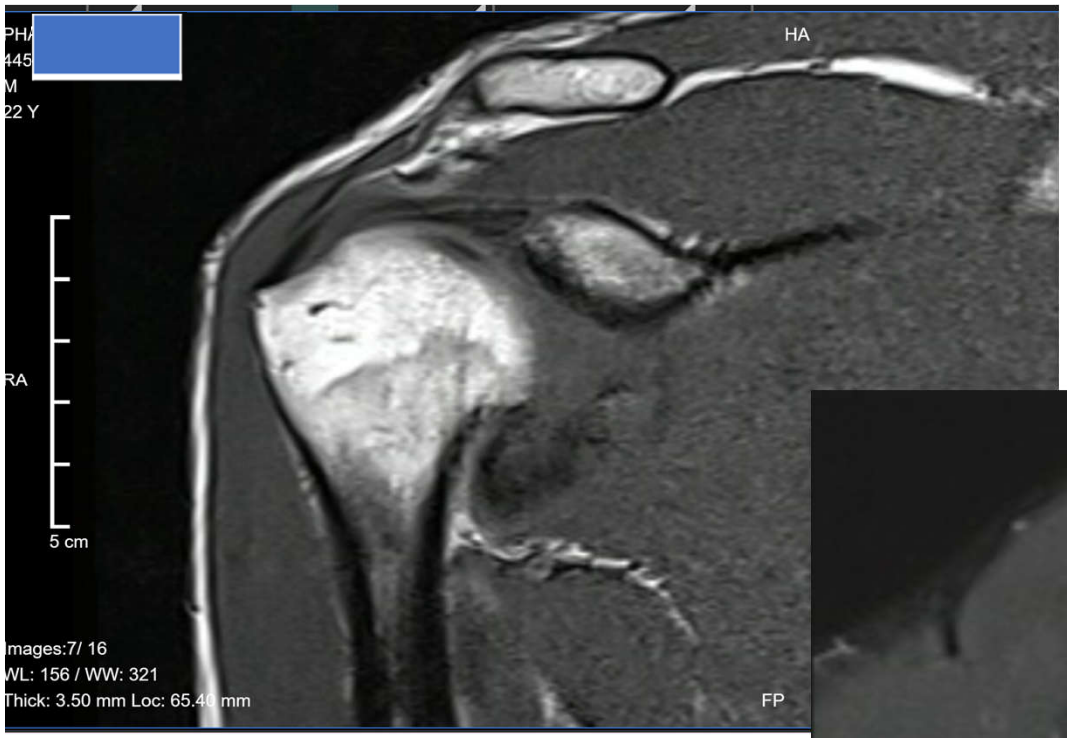


PVNS

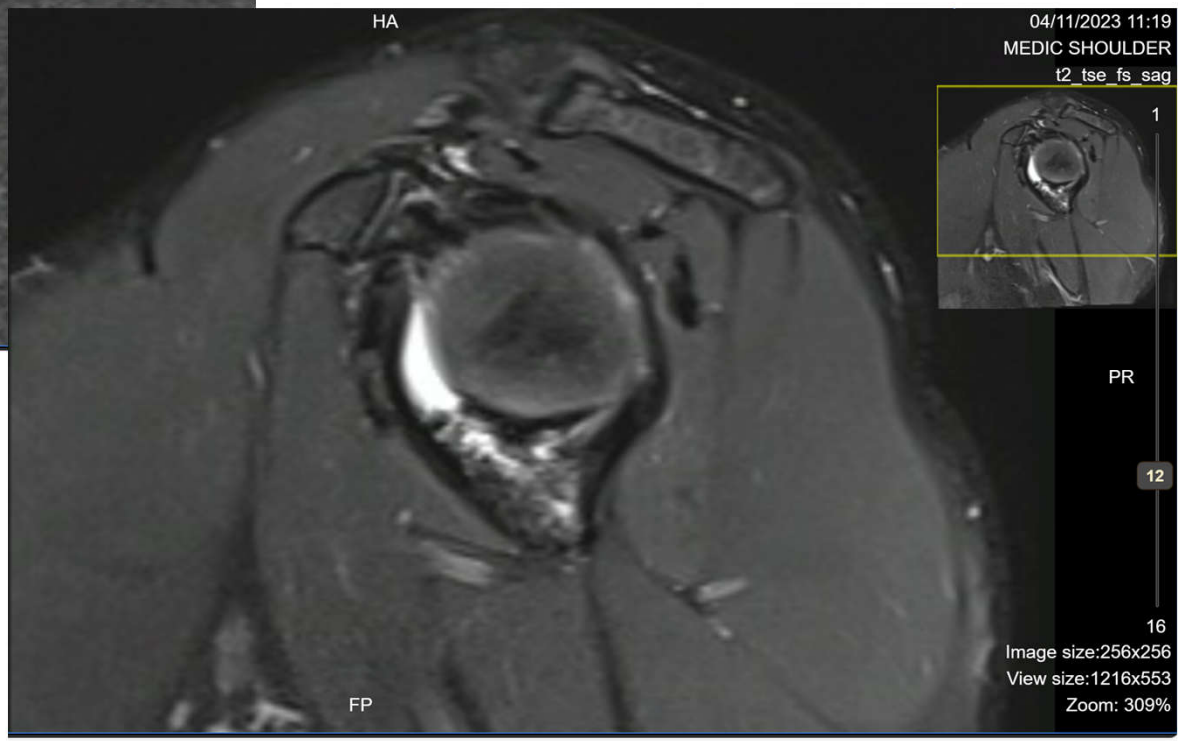

HA
5 cm
mages:7/ 16
WL: 144 / WW: 354
Thick: 3.50 mm Loc: 65.40 mm
HA
04/11/2023 11:19
MEDIC SHOULDER
t2_tse_fs_sag
1
PR
12
16
Image size:256x256
View size:1216x553
Zoom: 309%
FP



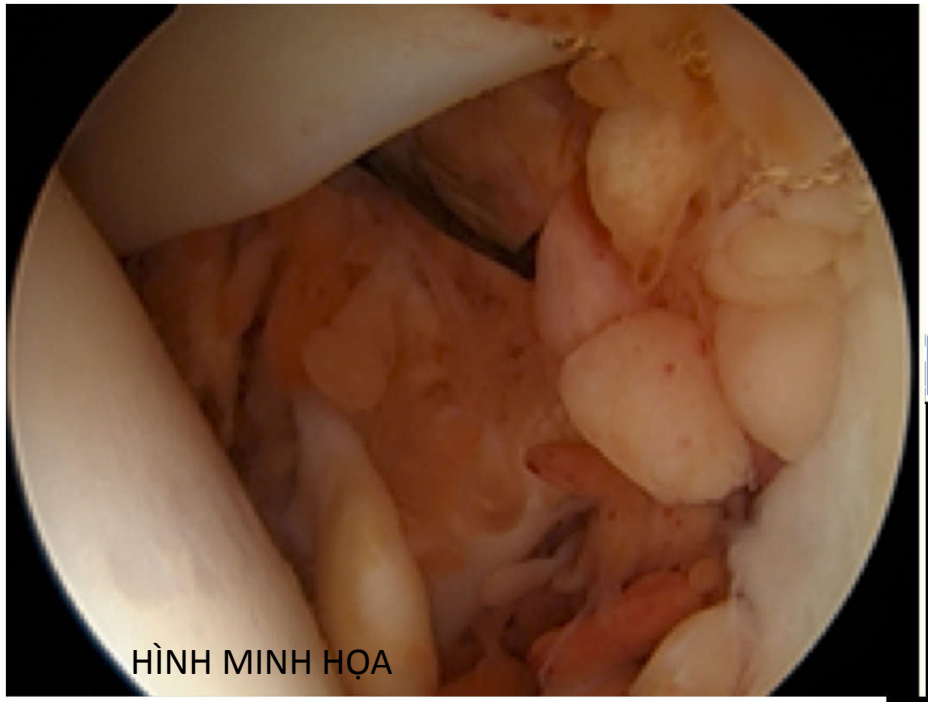
MRI is the mainstay of the diagnostic workup and demonstrates a periarticular or synovial nodular mass, so-called “blooming artifact,”



Low signal on T1 and T2 sequences (“dark on dark”) signifying hemosiderin deposition



MEDIC
www.medic.com.vn



MEDIC
www.medic.com.vn

Introduction

Pigmented villonodular synovitis (PVNS) is a proliferative, typically monoarticular condition of the synovium occurring in 1.8 per million people [1]. This condition most commonly arises in the fourth to sixth decades of life and has no clear gender predilection [2]. Although both neoplastic and inflammatory etiologies have been proposed, its pathogenesis remains uncertain [3]. PVNS occurs in either localized or diffuse forms, of which the latter is more common, is more rapidly destructive, and carries a poorer prognosis [3]. The localized form causes a focal, pedunculated, nodular synovial lesion, whereas the diffuse form is characterized by global synovitis with a proclivity for extra-articular extension and higher risk of postoperative disease recurrence. PVNS is characterized by the insidious onset of atraumatic and often intermittent pain, recurrent effusion, and painful shoulder motion, which frequently result in diagnostic and treatment delay. In a series of diffuse-type knee PVNS, only 17% of patients were appropriately diagnosed prior to referral [4]. Radiographs have low diagnostic yield but occasionally demonstrate periarticular erosions or early degenerative changes. MRI is the mainstay of the diagnostic workup and demonstrates a periarticular or synovial nodular mass, so-called “blooming artifact,” [5] reciprocal periarticular bony lesions, and/or low signal on T1 and T2 sequences (“dark on dark”) signifying

While PVNS has been described in numerous joints, chiefly the knee, reports of shoulder involvement are extremely rare. Previous case reports have linked shoulder PVNS with massive, often irreparable rotator cuff tears [7-15] and chondral lesions [7,10,16,17]. Numerous treatment modalities have been proposed, including open or arthroscopic synovectomy and debridement [7,8,10,12,18] versus arthroplasty [16,19,20], with or without the use of adjuvant radiation [8], depending on the severity and extent of intra-articular disease, presence of extra-articular disease, and surgeon experience. In this case report, we describe a case of

Case Report

Pigmented Villonodular Synovitis of the Shoulder After Anterior Capsulolabral Reconstruction

Joseph C. Cheng, M.D., Eugene M. Wolf, M.D., J. Emory Chapman, M.D., and James O. Johnston, M.D.

Summary: Pigmented villonodular synovitis (PVNS) is a proliferative disorder of the synovium affecting joints, bursae, or tendon sheaths. PVNS is further classified into diffuse and localized forms and rarely affects the shoulder. We report a case of nodular synovitis of the shoulder after arthroscopic and open anterior capsulolabral reconstruction. The histopathology and treatment of a nodular form of PVNS of the shoulder is discussed. **Key Words:** Pigmented villonodular synovitis—Shoulder—Arthroscopic bankart repair.

From the Department of Orthopaedic Surgery, University of California San Francisco (J.C.C., J.O.J.), and California Orthopaedic and Sports Medical Group (E.M.W., J.E.C.), San Francisco, California, U.S.A.

Address correspondence to Joseph C. Cheng, M.D., The Orthopaedic Group of San Francisco, Inc, 1800 Sullivan Ave., Suite 402, Daly City, CA 94015, U.S.A.

0749-8063/97/1302-1383$3.00/0

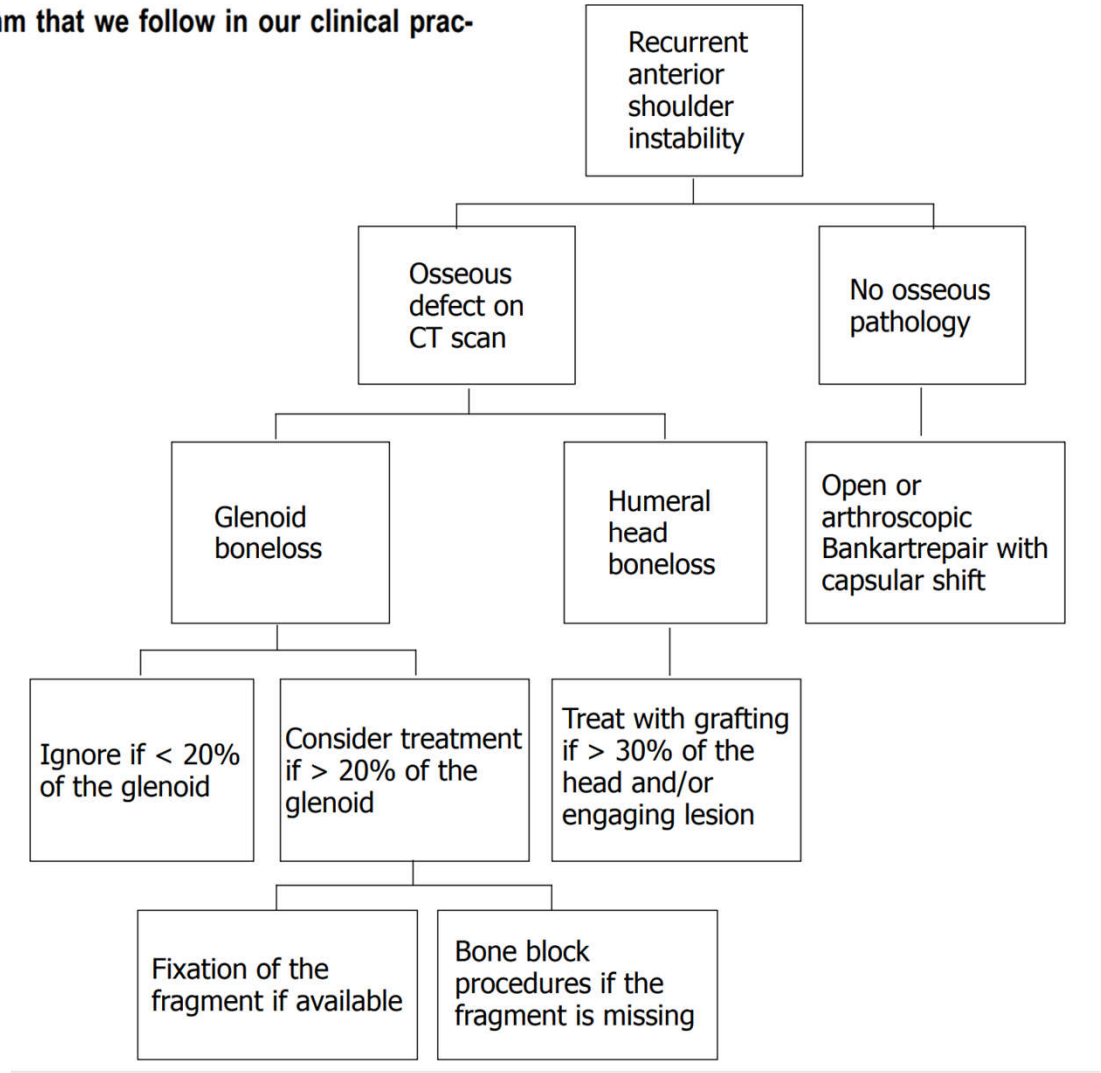
To our knowledge, this is the first report of nodular PVNS of the shoulder following arthroscopic Bankart stabilization and open anterior capsulolabral reconstructions.

Anterior shoulder instability is among the most commonly seen disorders in traumatology, which typically affects the younger age population with high rates of recurrence. Recurrent anterior instability of the shoulder is a complex disease which may include both soft tissue and osseous pathologies. Primary clinical approach should be

RISK FACTORS FOR RECURRENT INSTABILITY

Many different risk factors for recurrent anterior shoulder dislocation such as young age, participation in high demand contact sports activities, previous history of ipsilateral traumatic dislocation, presence of Hill-Sachs or osseous Bankart lesion, ipsilateral rotator cuff or deltoid muscle insufficiency, and underlying ligamentous laxity have been described

Figure 7 Treatment algorithm that we follow in our clinical practice.



CONCLUSION

Anterior shoulder instability is among the most commonly seen disorders in traumatology, which typically affects the younger age population with high rates of recurrence. Recurrent anterior instability of the shoulder is a complex disease which may include both soft tissue and osseous pathologies. Primary clinical approach should be the combination of a careful medical history, a detailed physical examination, and appropriate imaging studies to recognize changes leading to recurrence. Although various surgical techniques have been described, a consensus does not exist and thus, surgeons should select the most effective procedure to restore joint stability in a patient-specific manner.

THANK YOU