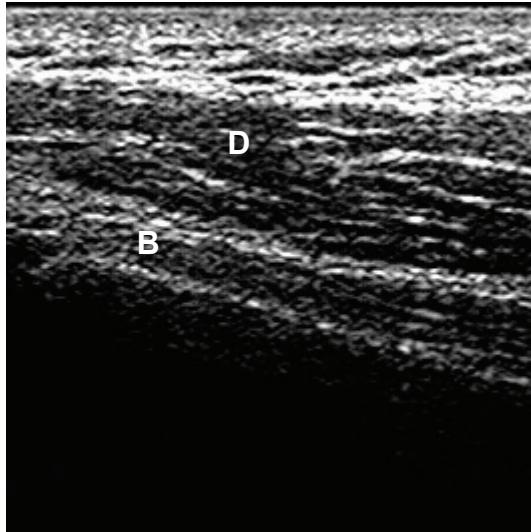


Shoulder

Healthy Subject
RA
Other Diseases

Shoulder



Healthy Subject

Longitudinal scan of biceps

B = biceps tendon

D = deltoid muscle



Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)

Shoulder

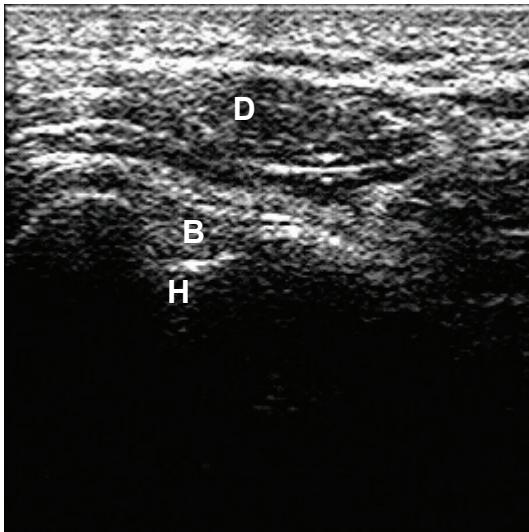
Healthy Subject

Transverse scan of biceps

B = biceps tendon

H = humerus

D = deltoid muscle



Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)

Shoulder



Healthy Subject

**Longitudinal scan of
Supscapularis**

Subs = subscapularis tendon

H = humerus

D = deltoid muscle



Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)

Shoulder

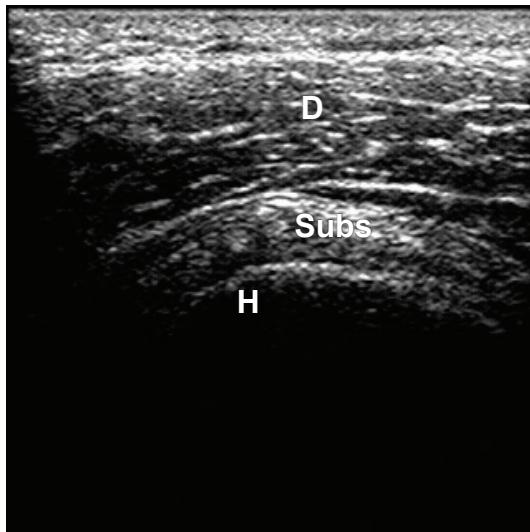
Healthy Subject

Transverse scan of
Supscapularis

Subs = subscapularis tendon

H = humerus

D = deltoid muscle



Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)

Shoulder



Healthy Subject

Longitudinal scan of
infraspinatus

IS = Infraspinatus tendon

H = humerus

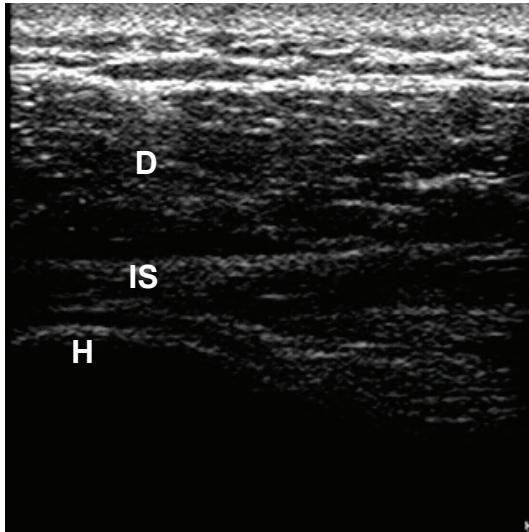
D = deltoid muscle



Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)

Shoulder



Healthy Subject

Transverse scan of
infraspinatus

IS = Infraspinatus tendon

H = humerus

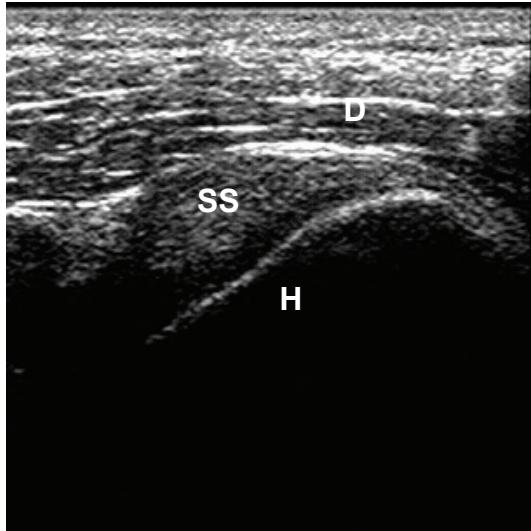
D = deltoid muscle



Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)

Shoulder



Healthy Subject

Longitudinal scan of
supraspinatus

SS = supraspinatus tendon

H = humerus

D = deltoid muscle



Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)

Shoulder

Healthy Subject

Transverse scan of supraspinatus

SS = supraspinatus tendon

H = humerus

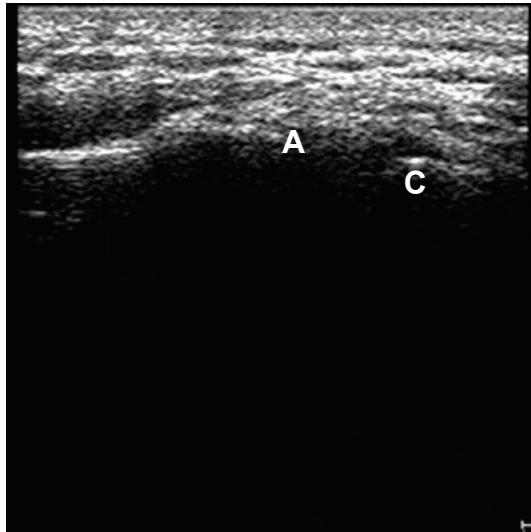
D = deltoid muscle



Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)

Shoulder



Healthy Subject

Longitudinal scan of
Acromial-Clavicle

A = Acromion

C = Clavicle



Chang, Chi-Ching

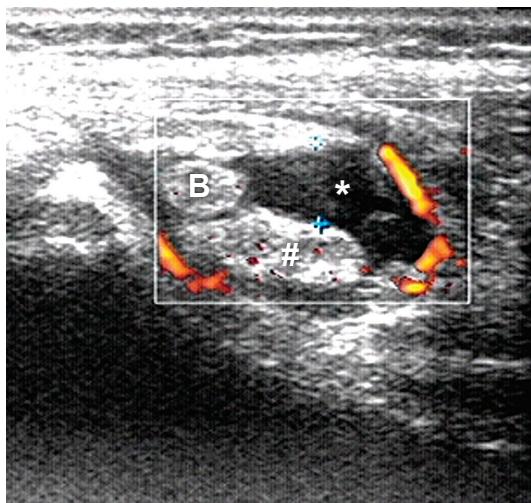
Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)

Shoulder

RA

Transverse scan

Tenosynovitis . Marked widening of biceps tendon sheath with synovial proliferation. Power doppler showed increased vascularity.
B=biceps tendon
*=synovial fluid
#=synovial proliferation



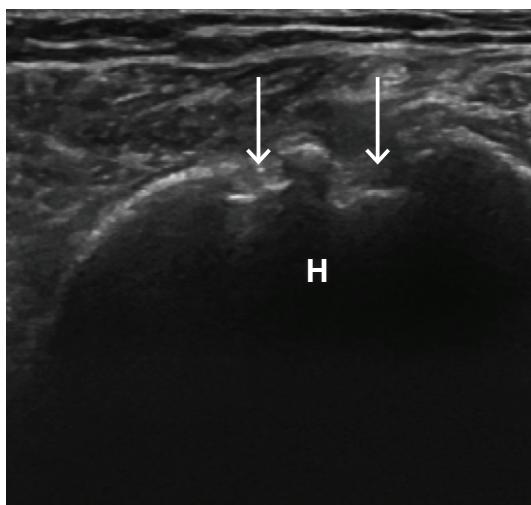
Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)

RA

Transverse scan

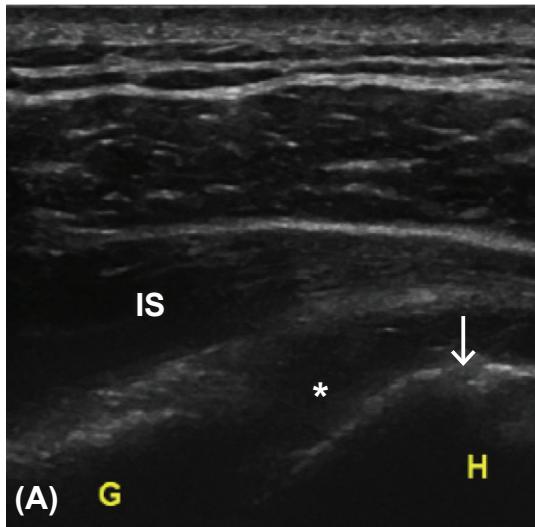
RA shoulder. US scan of anterior aspect of humerus head showed bone erosions (arrow). H: humerus head.



Lai, Kuo-Lung

Gray scale US using a GE E9 (General Electrics) with a linear probe (15MHz)

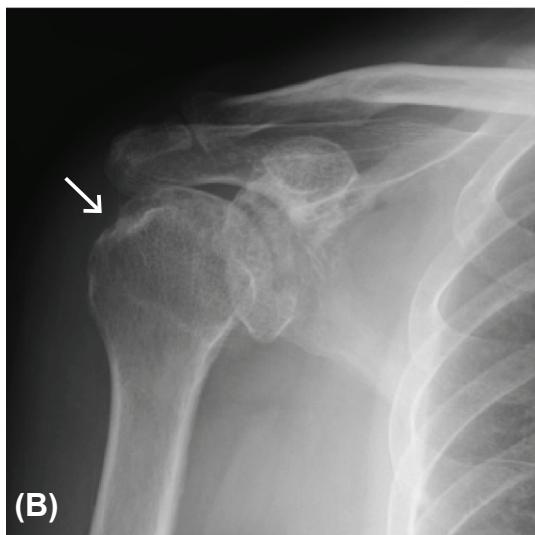
Shoulder



RA

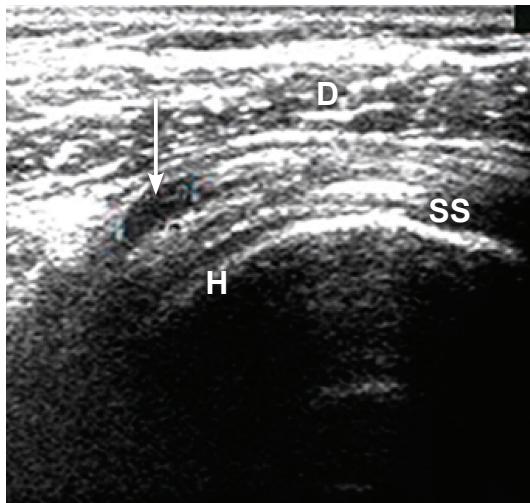
Transverse scan

RA shoulder. (A) US scan of posterior labrum showed synovial hypertrophy(*) and humerus bone erosion(arrow) (B) X-ray of the same shoulder showed humerus bone erosion(arrow). IS: infraspinatus tendon, G: glenoid, H: humerus head.

**Lai, Kuo-Lung**

Gray scale US using a GE E9 (General Electrics) with a linear probe (15MHz)

Shoulder



Other Disease

Partial Thickness Tear

Transverse scan of supraspinatus tendon

Hypoechoic lesion (arrow)

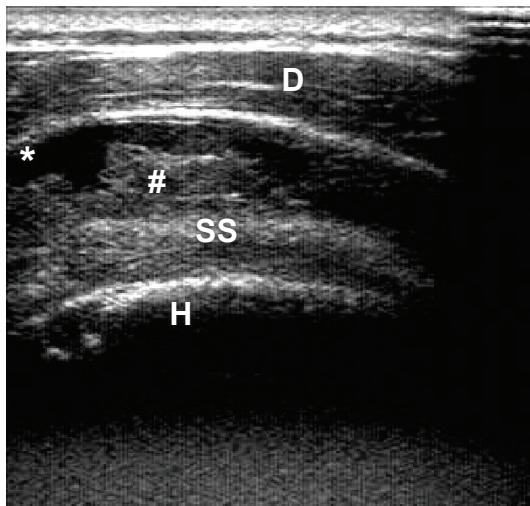
SS = supraspinatus tendon

H = humerus

D = deltoid muscle

Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)



Other Disease

Subacromial-

Subdeltoid Bursitis

Longitudinal scan of supraspinatus tendon

Effusion(*) and synovial proliferation (#)

SS = supraspinatus tendon

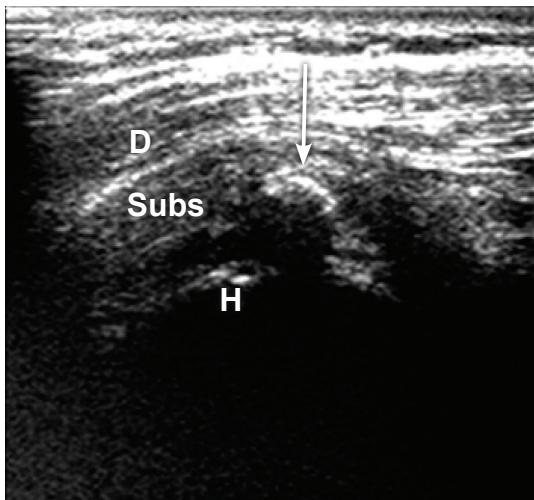
H = humerus

D = deltoid muscle

Chang, Chi-Ching

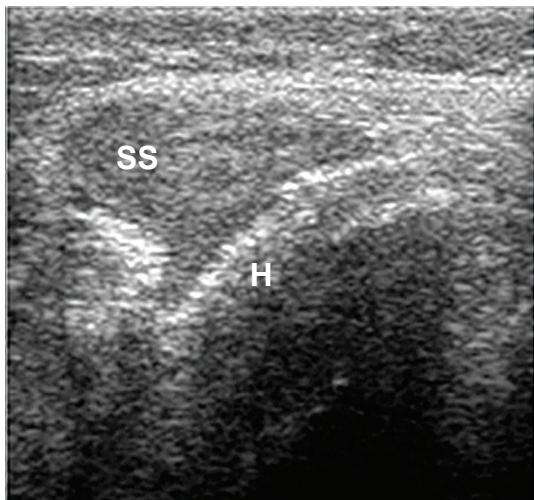
Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)

Shoulder



Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)



Chen, Ying-Chou

Grey scale US using Acuson machine

Other Disease

Calcified Tendonitis

Longitudinal scan of supscapularis

Calcified lesion with acoustic shadow (arrow) in tendon

Subs = subscapularis tendon

H = humerus

D = deltoid muscle

Other Disease

Amyloidosis

Right shoulder

Longitudinal scan

Heterogenous deposition at supraspinatus tendon

SS = supraspinatus tendon

H = humerus

Shoulder

Other Disease

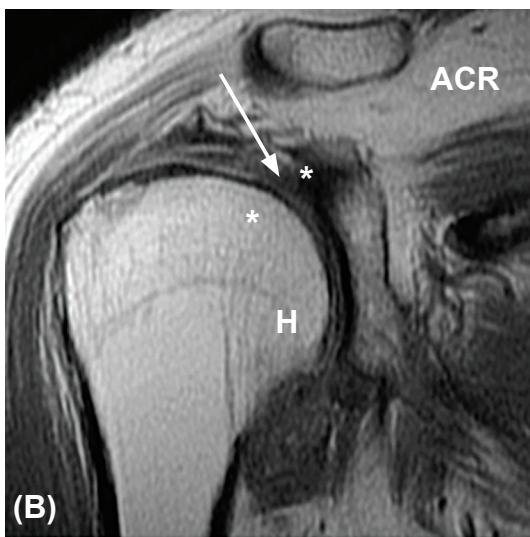
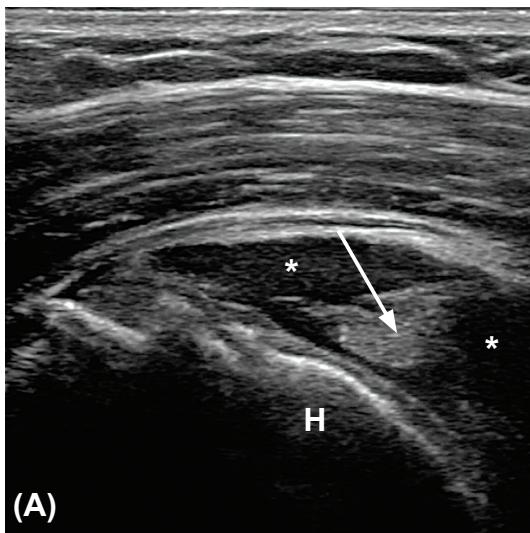
Rotator Cuff Tear (traumatic)

Longitudinal scan of supraspinatus tendon (A) and corresponding coronal image of MRI (B).

(A) Note a triangular hyperechoic part indicating residual supraspinatus tendon (arrow) surrounded by hypoechoic lesion (*) suggesting hematoma formation after a massive tear.

(B) MRI with proton density image shows the corresponding triangular residual tendon with high signal intensity (arrow) and surrounding hematoma with low signal intensity (*).

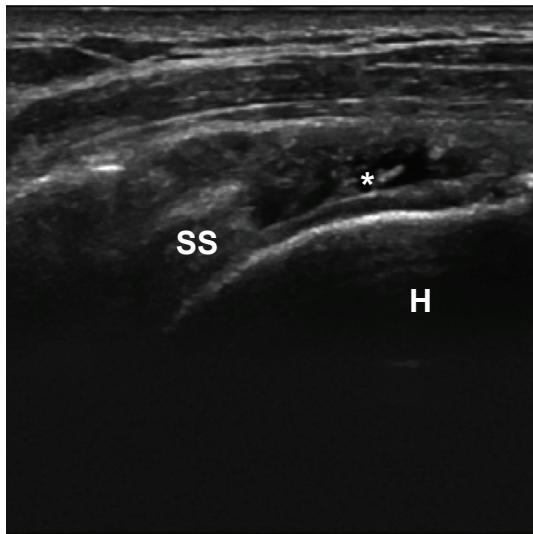
H = humerus;
ACR = acromium.



Chen, Hsin-Hua

Grey scale US using a Philip iU22 with a volumetric probe (4D, 5-13MHz) (A) and corresponding MRI (Pd, coronal view) (B)

Shoulder



Other Disease

Full thickness tear

Longitudinal scan of supraspinatus tendon

Complete tear of supraspinatus tendon. The ruptured tendon was retracted resulting in a space filled with tissue fluid (*). SS: supraspinatus tendon, H: humerus.

Lai, Kuo-Lung

Gray scale US using a GE E9 (General Electrics) with a linear probe (15MHz)

Shoulder

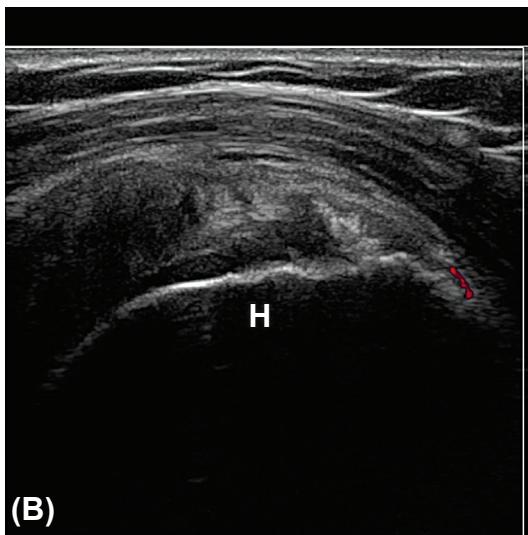
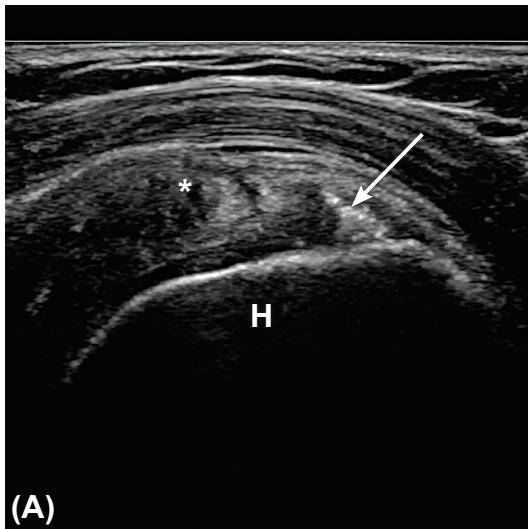
Other Disease

Rotator Cuff Tendinopathy

Longitudinal scan of supraspinatus tendon (A) and Power Doppler image (B).

(A) Several tiny anechoic lesions (*) and hyperechoic lesions without acoustic shadow (arrow) in supraspinatus tendon which suggest micro partial tears and microcalcifications respectively.

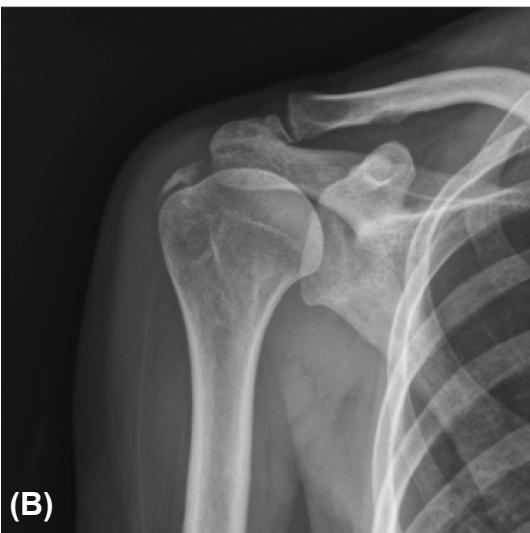
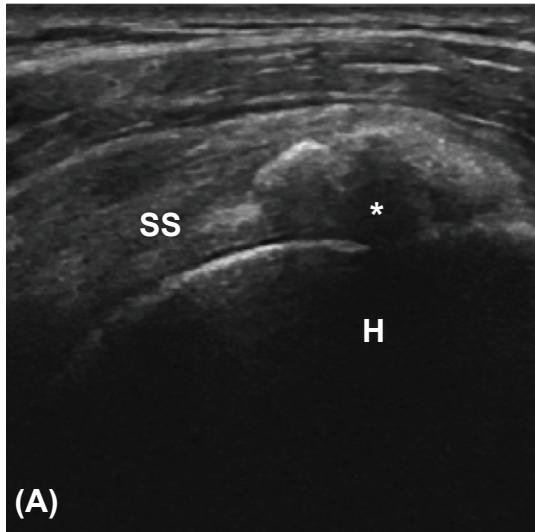
(B) PDUS showed only one Doppler signal in distal end of supraspinatus tendon. The above findings suggest supraspinatus tendinopathy with micro-calcification and several tiny focal partial tears.
H = humerus.



Chen, Hsin-Hua

Grey scale and power Doppler US using a Philip iU22 with a volumetric probe (4D, 5-13MHz)

Shoulder



Other Disease

Calcified tendinosis

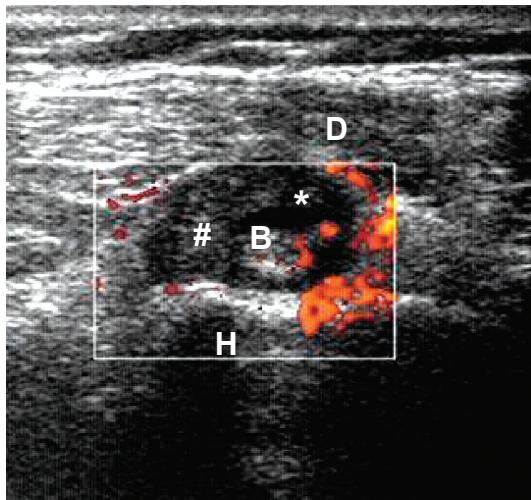
Longitudinal scan of supraspinatus tendon

Calcified supraspinatus tendinosis. (A)calcification (*) with acoustic shadow at supraspinatus tendon (B) X-ray of the same shoulder showed a radiopaque lesion at supraspinatus tendon. SS: supraspinatus tendon, H: humerus.

Lai, Kuo-Lung

Gray scale US using a GE E9 (General Electrics) with a linear probe (15MHz)

Shoulder



Other Disease

Tenosynovitis

Transverse scan of biceps

Anechoic(*) tendon sheath widening of the long head of biceps tendon with synovial proliferation(#), PDS showed increased vascularity.

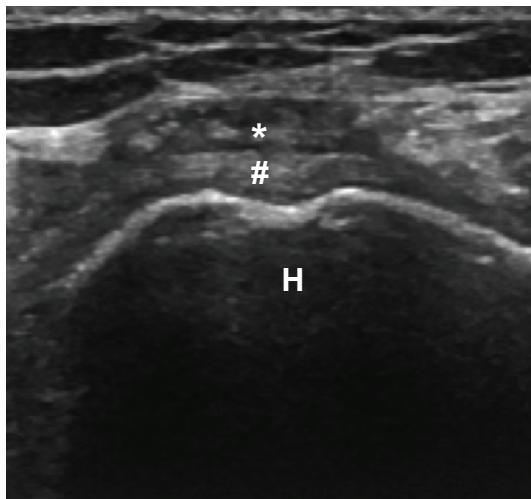
B = biceps tendon

H = humerus

D = deltoid muscle

Chang, Chi-Ching

Grey scale US using a Envisor (Philips, the Netherland) with a multi-frequency linear transducer (7~12 MHz)



Other disease

Partial thickness tear

Longitudinal scan of supraspinatus tendon

Supraspinatus tendon partial tear in a patient with psoriatic arthritis. Longitudinal US scan showed only deep string of supraspinatus tendon (#) was present. The superficial string of supraspinatus tendon was absent and the space was filled with hematoma (*). H: humerus head.

Lai, Kuo-Lung

Gray scale US using a GE E9 (General Electrics) with a linear probe (15MHz)

Memo