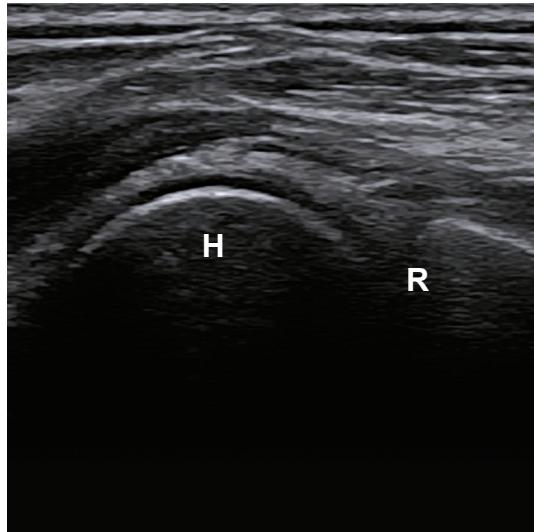


Elbow

Healthy Subject
RA
Crystal-related
Other Diseases

Elbow



Healthy Subject
Longitudinal scan

H = humerus

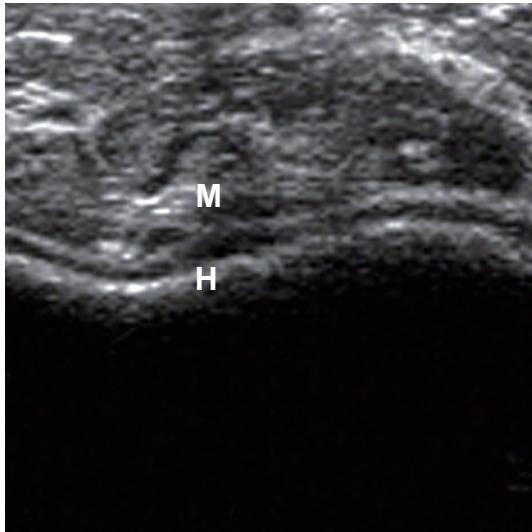
R = radius



Chang, Chi-Ching

US using a Logiq P5 (General Electrics Medical Systems, Milwaukee, WI) with a linear probe (12L)

Elbow

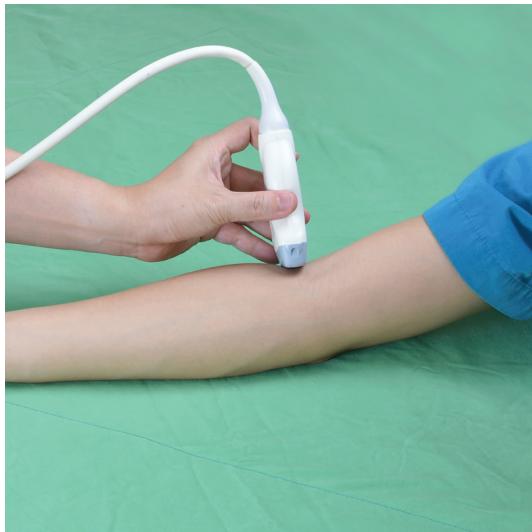


Healthy Subject

Anterior transverse scan

H = humerus

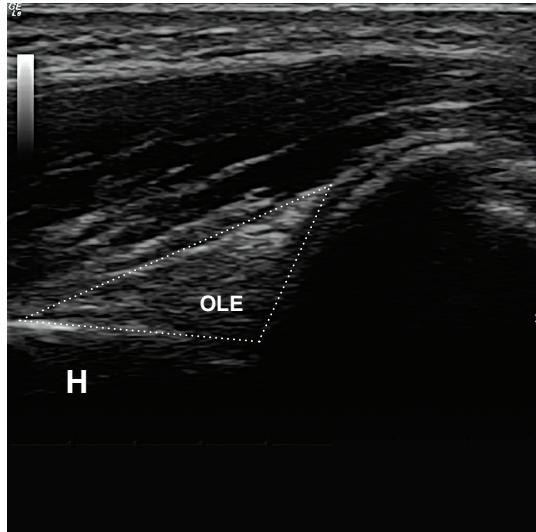
M = muscle



Chang, Chi-Ching

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

Elbow



Healthy Subject

**Longitudinal scan of
olecranon fossa**

H= humerus

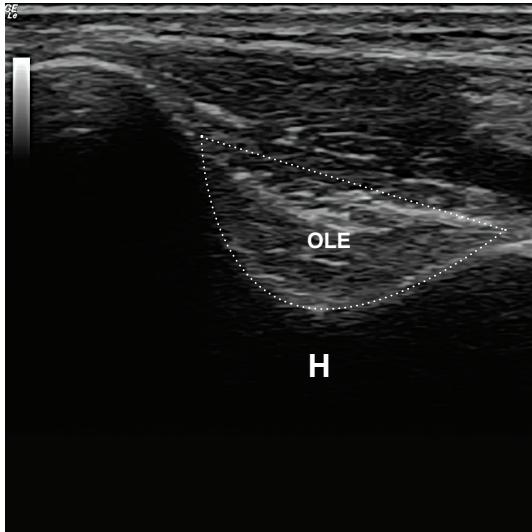
OLE = olecranon fossa



Chang, Chi-Ching

US using a Logiq P5 (General Electrics Medical Systems, Milwaukee, WI) with a linear probe (12L)

Elbow



Healthy Subject

Transverse scan of
olecranon fossa

H= humer

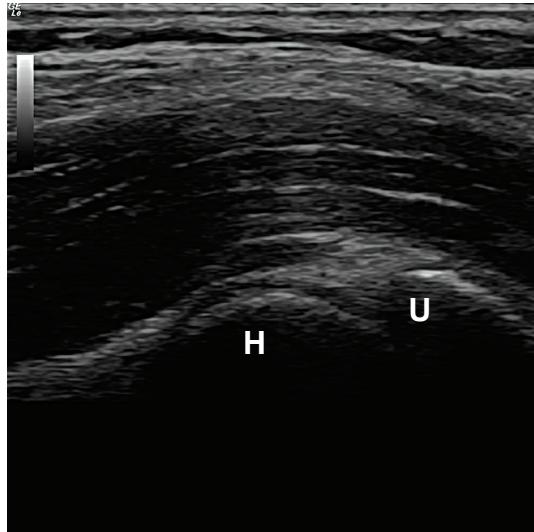
OLE = olecranon fossa



Chang, Chi-Ching

US using a Logiq P5 (General Electrics Medical Systems, Milwaukee, WI) with a linear probe (12L)

Elbow



Healthy Subject
Longitudinal scan

H = humerus

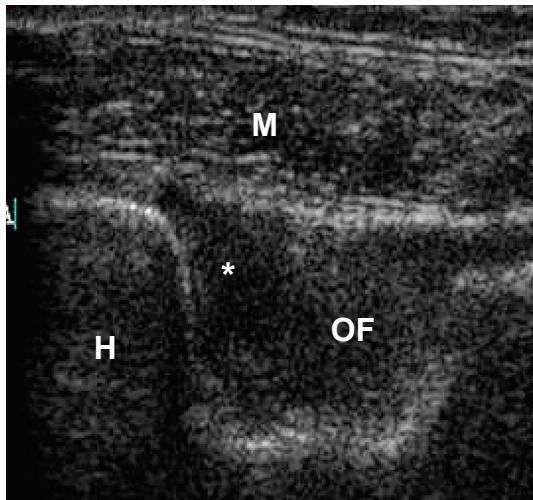
U = ulnar



Chang, Chi-Ching

US using a Logiq P5 (General Electrics Medical Systems, Milwaukee, WI) with a linear probe (12L)

Elbow



RA

Posterior transverse scan of olecranon fossa

Marked hypoanechoic joint space widening (*).

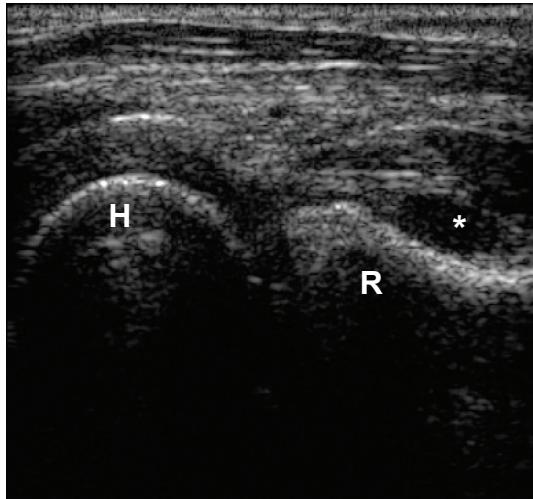
H = humerus

OF = olecranon fossa

M = triceps muscle

Chang, Chi-Ching

Grey scale US using a Taitan 180



RA

Anterior humeroradial longitudinal scan

Hypoanechoic joint cavity widening

Effusion(*)

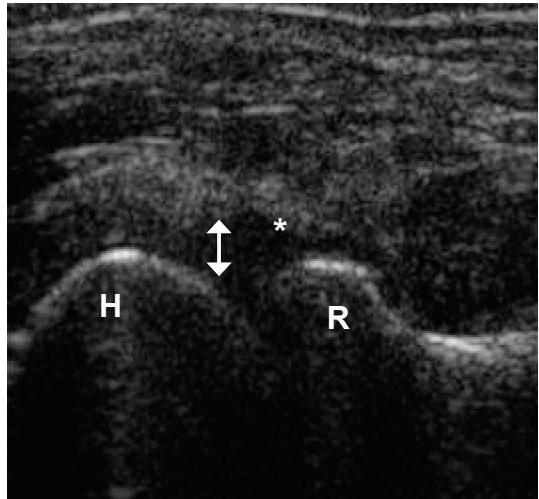
H = humerus

R = radius

Chang, Chi-Ching

Grey scale US using a Taitan 180

Elbow



RA

Anterior humeroradial longitudinal scan

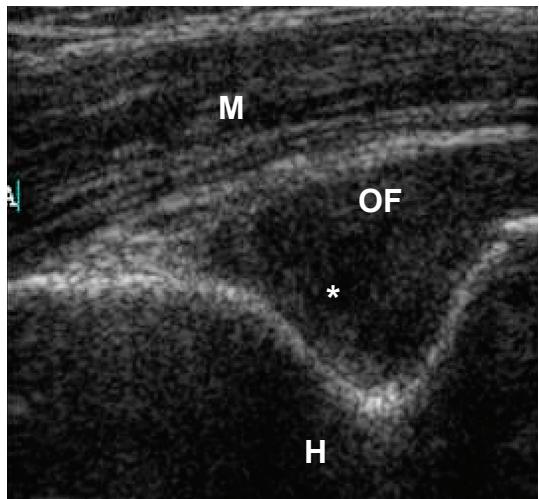
Hypoechoic joint cavity
widening(double arrow head)
Effusion(*)

H = humerus

R = radius

Chang, Chi-Ching

Grey scale US using a Taitan 180



RA

Posterior longitudinal scan of olecranon fossa

Marked hypoanechoic joint
space widening (*).

H = humerus

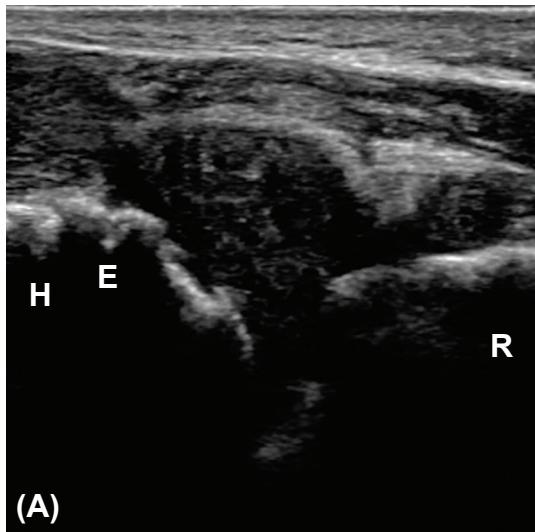
OF = olecranon fossa

M = triceps muscle

Chang, Chi-Ching

Grey scale US using a Taitan 180

Elbow



RA

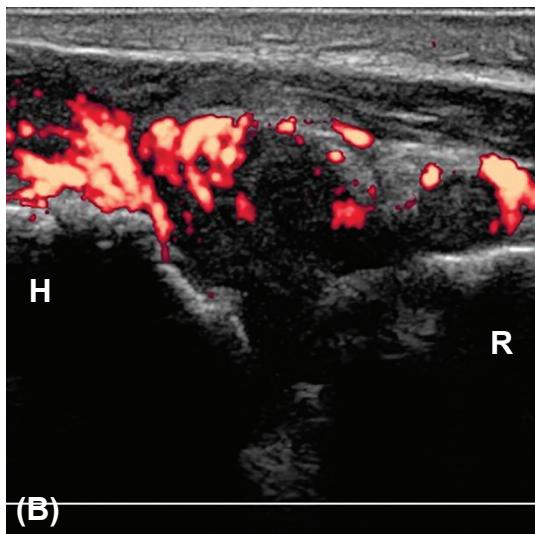
Longitudinal scan of lateral recess

Marked widening of lateral recess of elbow joint with marked pannus formation and many confluent Doppler signals in the proliferated synovium.

H = humerus

R = radius

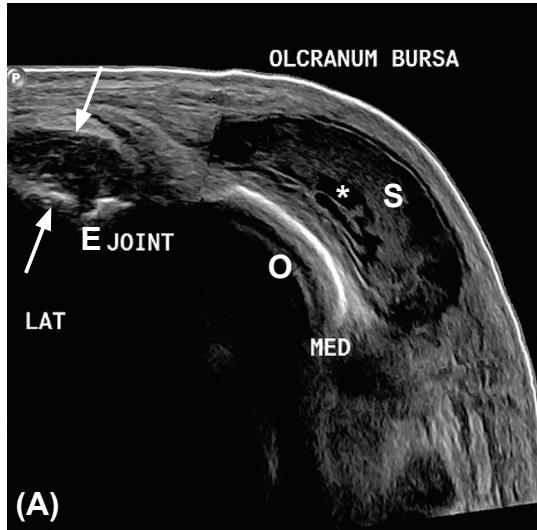
E = a tiny erosion



Chen, Hsin-Hua

Power Doppler US using a Philip iU22 with a volumetric probe (4D, 5-13MHz)

Elbow



RA

Olecranon Bursitis

Panoramic view of dorsal transverse scan (A) and longitudinal scan of olecranon fossa (B)

(A) Transverse scan shows widening of olecranon bursa with mixed hyperechoic lesions which suggest synovial membrane proliferation (S), and mild anechoic effusion effusion (*). Note the unconnected widened posterior recess of elbow joint in the lateral aspect with a small erosion (E).

(B) Longitudinal scan also demonstrates the disconnection (open arrow) between the olecranon bursa and joint capsule.

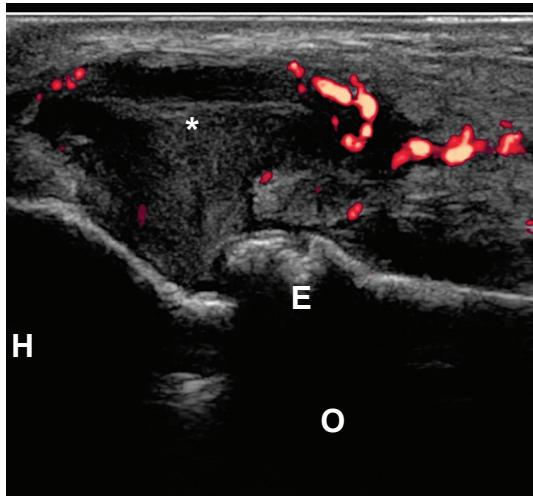
O = olecrano, MED = medial,
LAT = lateral, E = erosion.



Chen, Hsin-Hua

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

Elbow



RA

Elbow joint

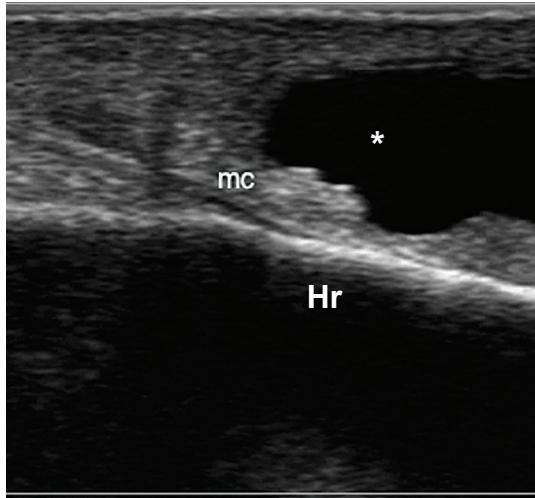
Dorsal longitudinal scan of posterior recess

Marked widening of posterior recess of elbow joint with marked pannus formation and many Doppler signals in the proliferated synovium. H = humerus, O = olecranon, E = erosion.

Chen, Hsin-Hua

Power Doppler US using a Philip iU22 with a volumetric probe (4D, 5-13MHz)

Elbow



Crystal-related

Gouty Bursitis

Right elbow joint

Dorsal longitudinal scan

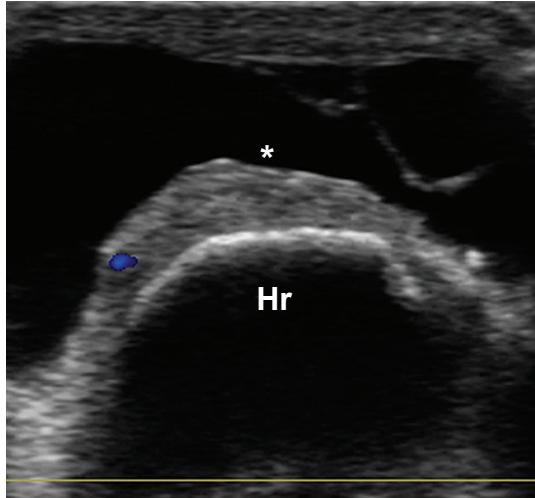
Massive olecranon bursa effusion (*).

mc = microtophi

Hr = humerus

Lin, Liang-Hung

Grey scale US using a Logiq 5 (General Electrics) with a linear probe (12L)



Crystal-related

Gouty Bursitis

Right elbow joint

Dorsal transverse scan

Massive olecranon bursa effusion (*).

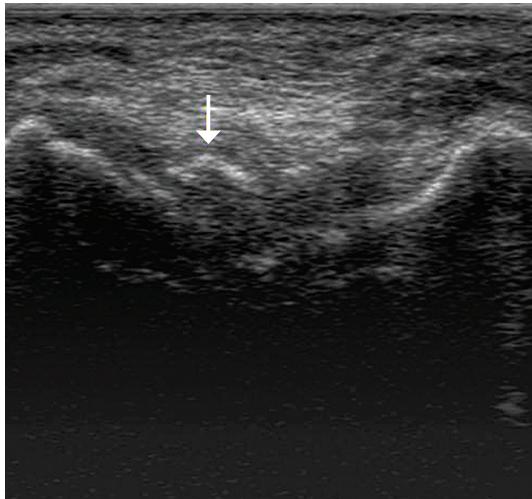
mc = microtophi

Hr = humerus

Lin, Liang-Hung

Grey scale US using a Logiq 5 (General Electrics) with a linear probe (12L)

Elbow



Crystal-related

Gouty Arthritis

Right elbow

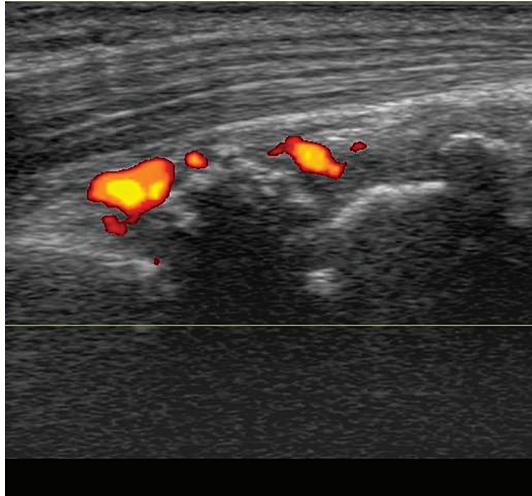
Dorsal transverse scan

Synovial hypertrophy with tophi deposition.

Arrow = tophi deposition with band shape lesion

Wu, Chien-Hui

Grey scale US using a Logiq P5 (General Electrics Medical Systems, Milwaukee, WI) with a linear probe (12L)



Crystal-related

Gouty Arthritis

Right elbow

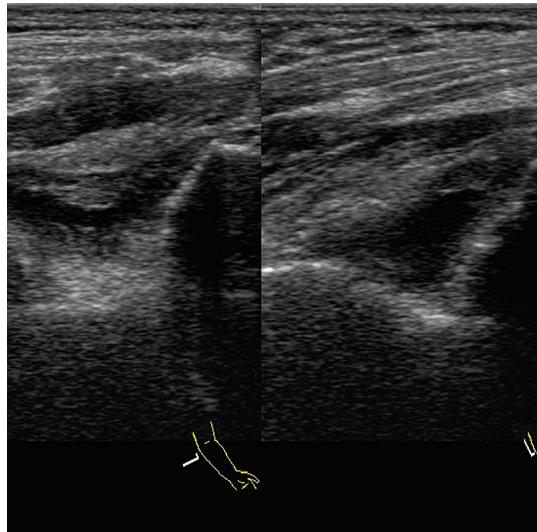
Dorsal longitudinal scan

Active gouty arthritis with tophi deposition With PDI grade 2 inflammation

Wu, Chien-Hui

Powder doppler US using a Logiq P5 (General Electrics Medical Systems, Milwaukee, WI) with a linear probe (12L)

Elbow



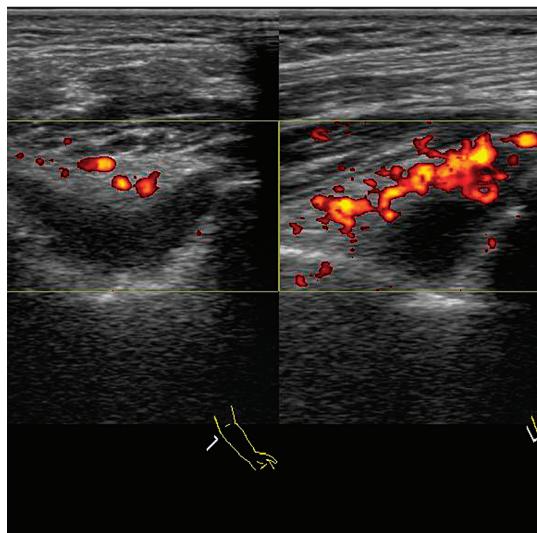
Crystal-related

Gouty Arthritis

Left elbow

Dorsal transverse scan

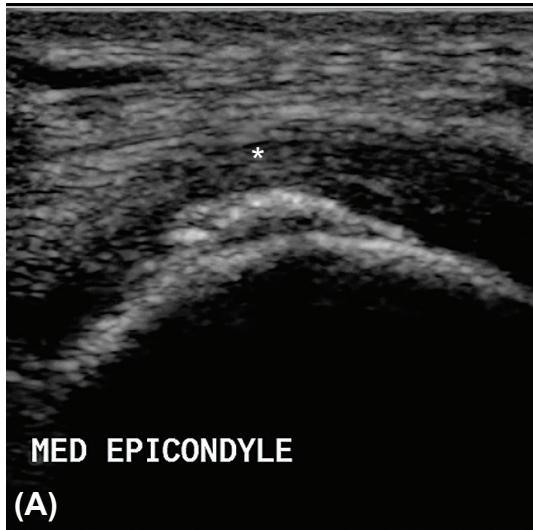
Acute gouty arthritis with
olecranon fossa synovial
hypertrophy and effusion



Wu, Chien-Hui

Grey scale US and power doppler US using a Logiq P5 (General Electrics Medical Systems, Milwaukee, WI) with a linear probe (12L)

Elbow



Other Diseases

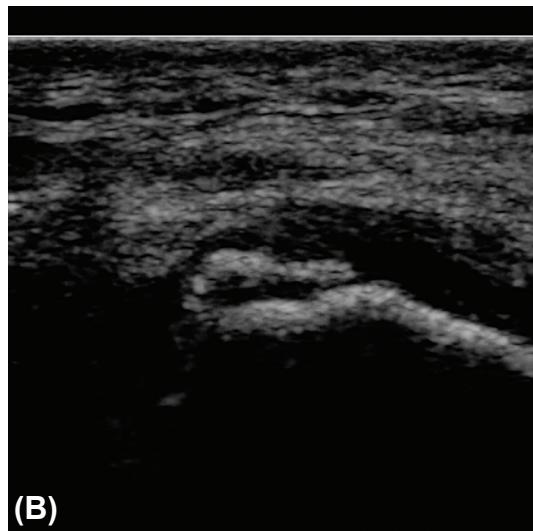
Calcified Tendinitis

Elbow joint

Medial longitudinal (A) and transverse (B) scan

Hyperechoic lesion in bony side of common flexor tendon (*) above left medial epicondyle.

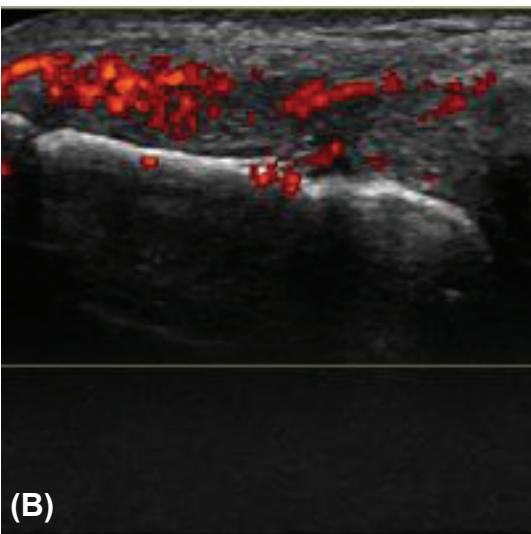
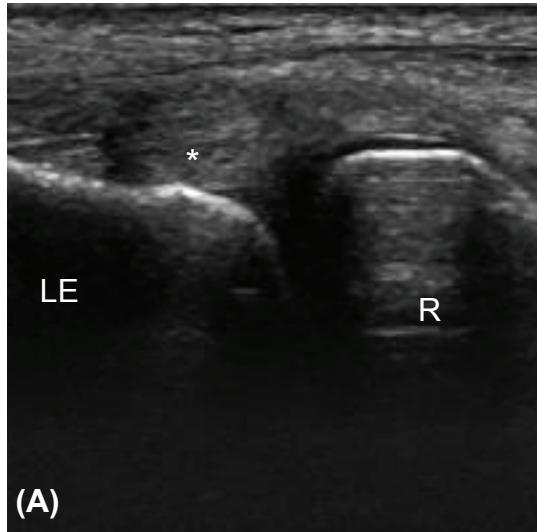
MED = medial.



Chen, Hsin-Hua

Grey scale US using a Philip iU22 with a linear probe (7-15MHz)

Elbow



Other Diseases

Tennis elbow

Longitudinal scan of lateral epicondyle

(A) Longitudinal US scan of the common extensor tendon insertion showed swelling and decreased echogenicity(*)
(B) Power Doppler US showed increased vascularity at the lesion. LE: lateral epicondyle, R: radius head.

Lai, Kuo-Lung

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

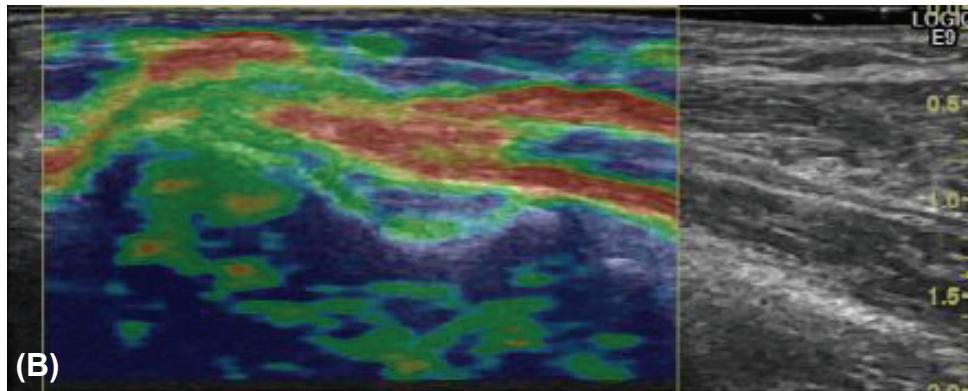
Elbow

Other Diseases

Tennis elbow

(A) Longitudinal US scan of the CET insertion showed swelling and loss of fibrillar pattern(*)

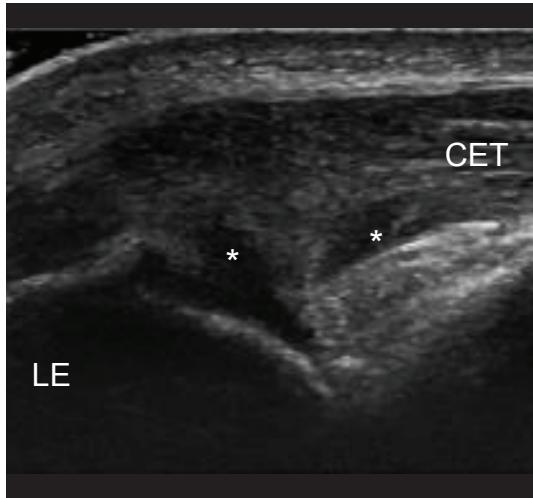
(B) Elastosonography showed red-yellowish (softened) areas at the CET insertion. CET: common extensor tendon, LE: lateral epicondyle.



Lai, Kuo-Lung

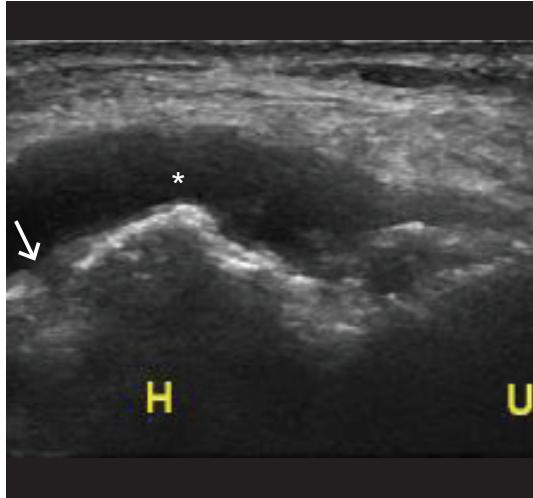
Gray scale US and elastosonography using a GE E9 (General Electrics) with a linear probe (15MHz)

Elbow



Lai, Kuo-Lung

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



Lai, Kuo-Lung

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

Other Diseases

Tennis elbow with tendon partial tear

Longitudinal scan of lateral epicondyle

Tennis elbow with tendon partial tear. Longitudinal US scan of the CET insertion showed swelling, hypoechoicity and two anechoic areas (*, partial tears). CET: common extensor tendon, LE: lateral epicondyle.

RA

Longitudinal scan

RA elbow. Longitudinal US scan of lateral aspect of elbow showed synovial hypertrophy (*), bone cortex irregularity and discontinuation (arrow, erosion). H: humerus, U: ulna.

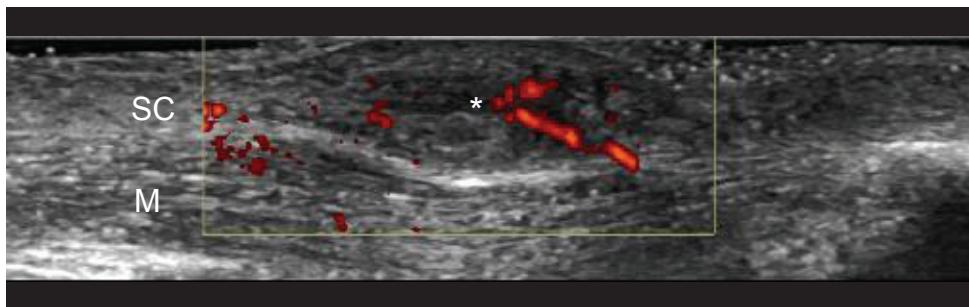
Elbow

Other Diseases

Rheumatoid nodule

Longitudinal scan

Rheumatoid nodule. Power Doppler US scan of a rheumatoid nodule (*) at the extensor site of elbow showed thickened subcutaneous tissue with decreased echogenicity and increased vascularity. SC: subcutaneous layer, M: muscle layer.



Lai, Kuo-Lung

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

Memo