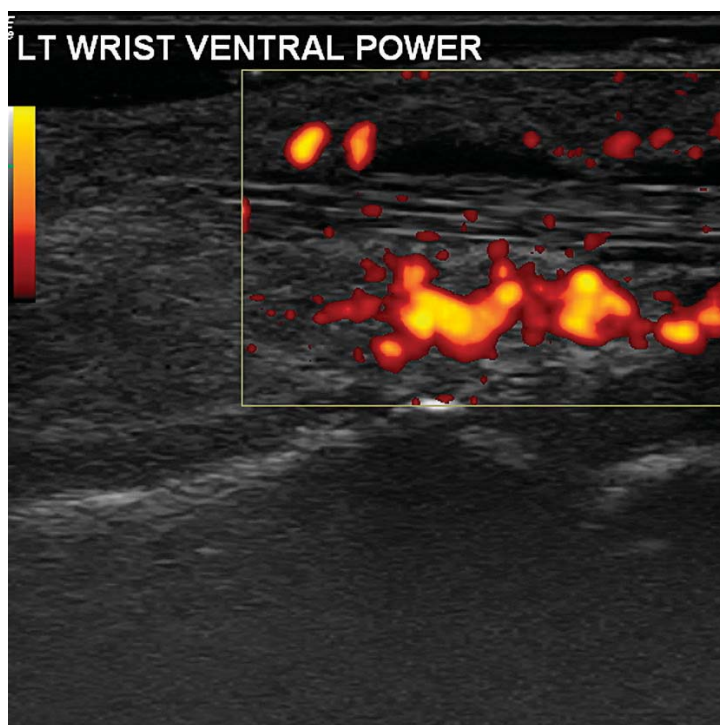
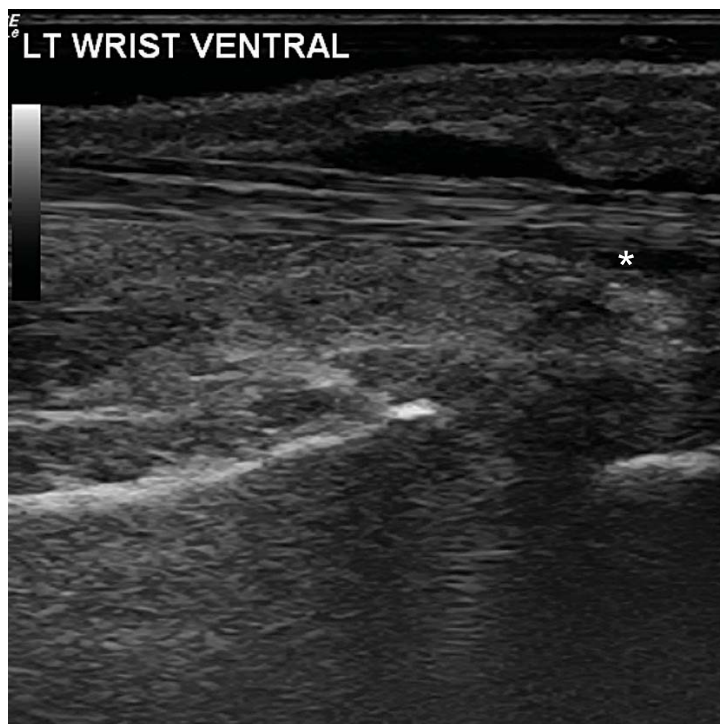


Wrist



RA

Longitudinal scan, ventral

Severe tenosynovitis of wrist (*). Marked tenosynovial hypertrophy with intense inflammation.

Kuo, Chang-Fu

Grey scale US using a Logiq 9 (General Electric Medical Systems, Milwaukee, WI) with a volumetric probe (4D16L), with power doppler

Shoulder

Elbow

Wrist

Hand

Hip

Knee

Ankle

Foot

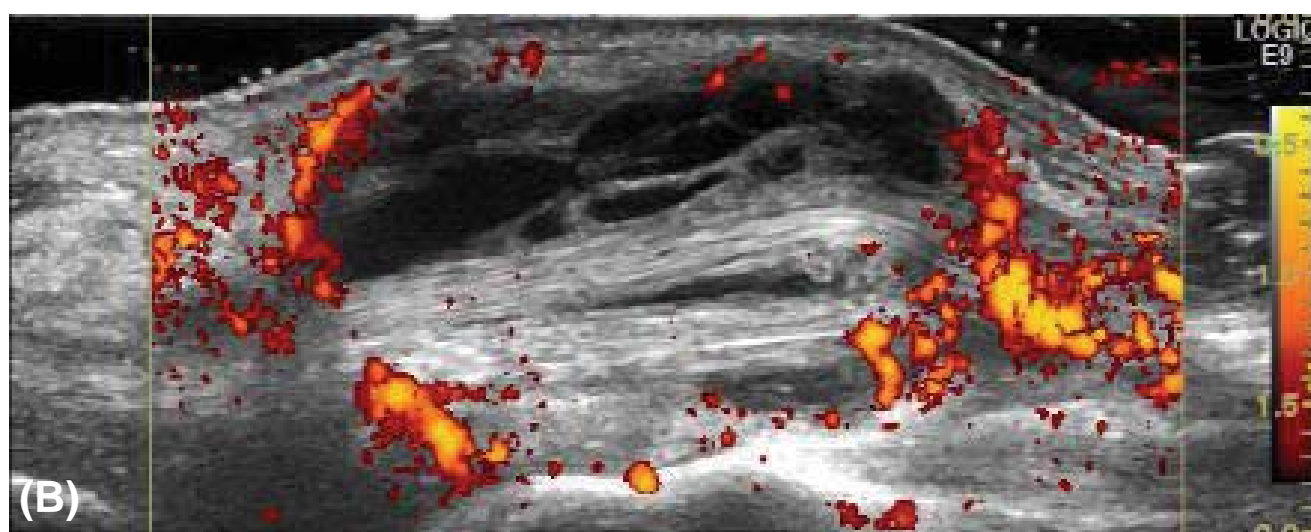
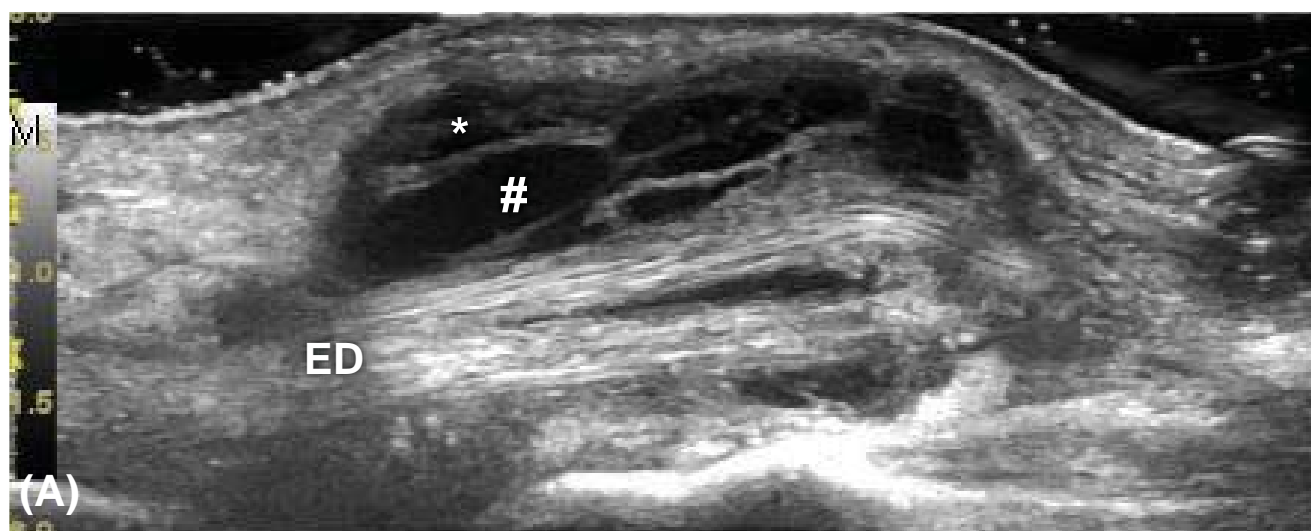
Others

Wrist

RA

(A) Longitudinal US scan of the extensor digitorum tendons showed marked tenosynovial hypertrophy (*) with effusion (#) and sequestration.

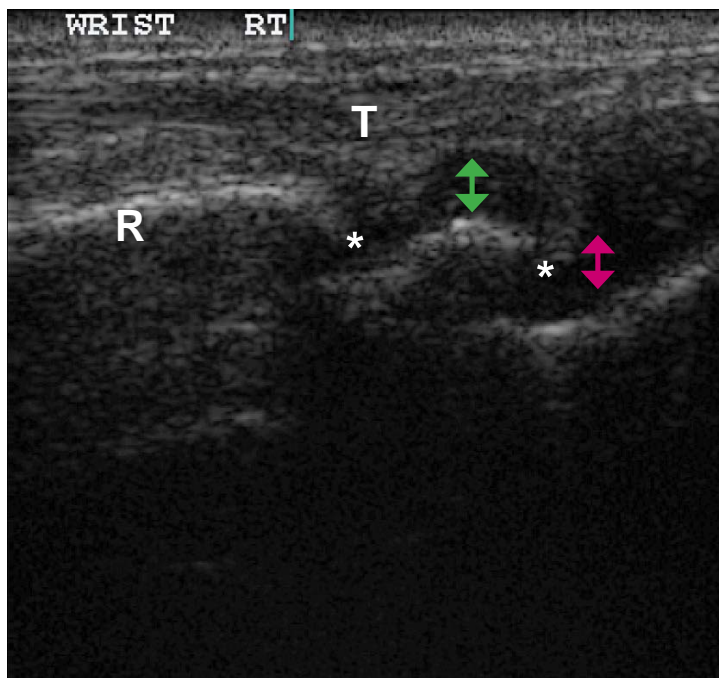
(B) Power Doppler US showed tenosynovial vascularity. ED:extensor digitorum tendons.



Lai, Kuo-Lung

Gray scale and power Doppler US (PRF 1.3KHz) using a GE E9 (General Electronics) with a linear probe (15MHz)

Wrist



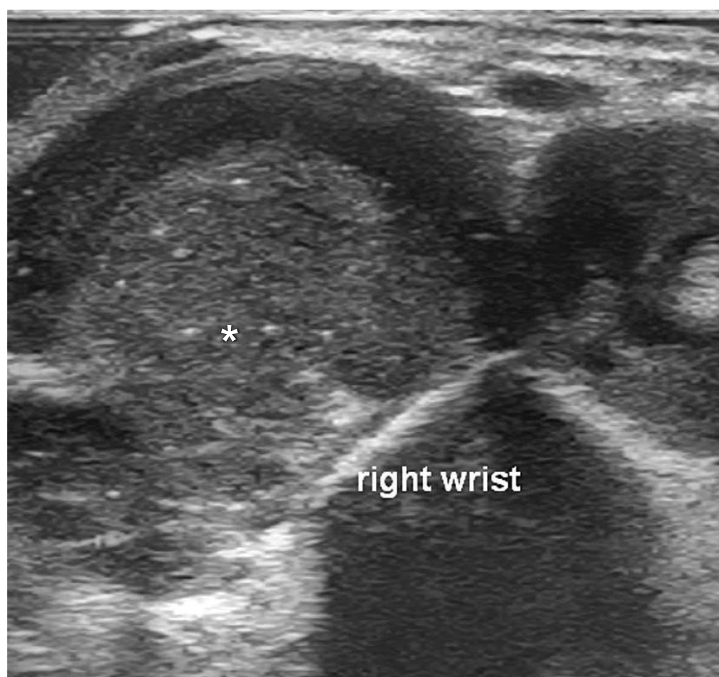
Chang, Chi-Ching

Grey scale US using a Taitan 180

RA

Longitudinal dorsal median scan of wrist

Marked joint cavity widening. Synovial fluid (*) echotexture appears anechoic with echoic spots, due to the presence of proteinaceous material. T = extensor digitorum tendons; RC = Radiocarpal (green double); MC = mid-carpal (red-double); R = radius



RA

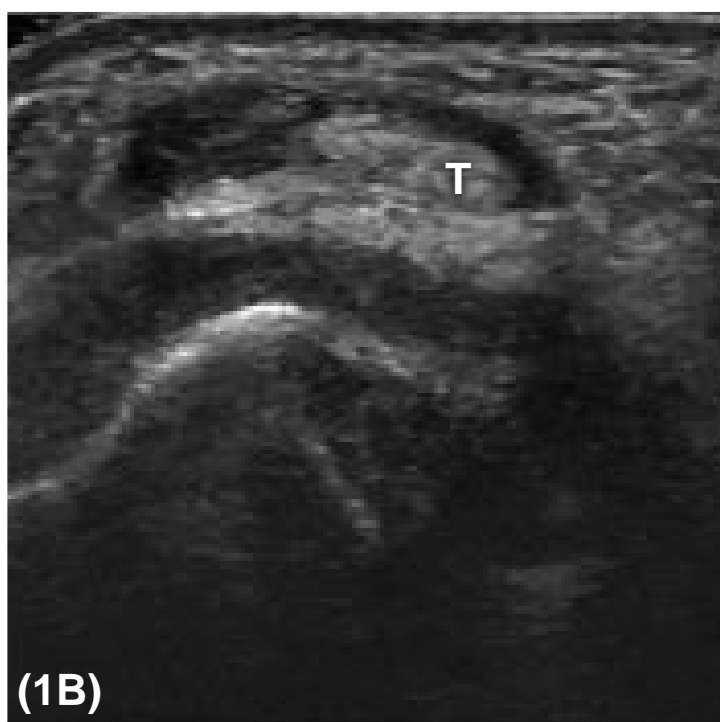
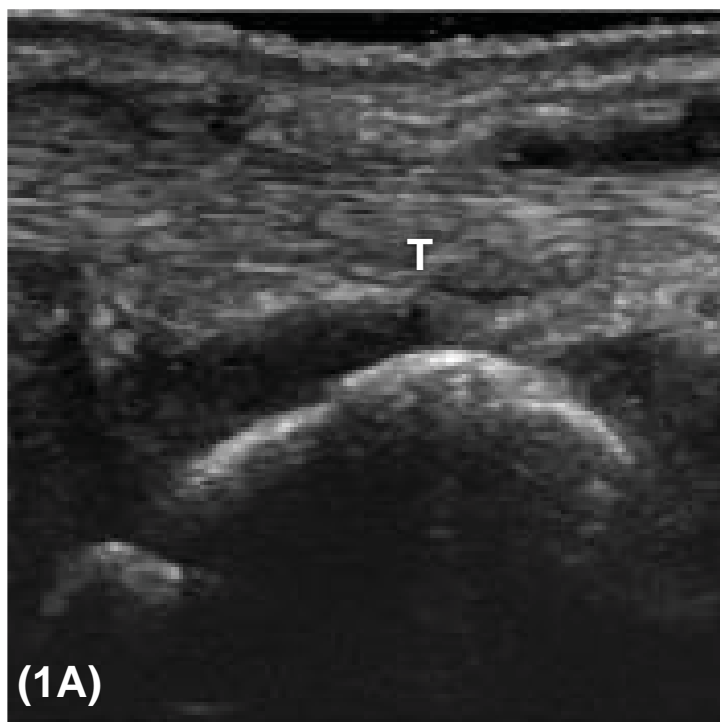
Transverse scan, dorsal

Extensive synovial hypertrophy (*) of joints and overlying tendons. The synovial hypertrophy is tumor-like.

Kuo, Chang-Fu

Grey scale US using a Logiq 9 (General Electric Medical Systems, Milwaukee, WI) with a volumetric probe (4D16L), with power doppler

Wrist



RA

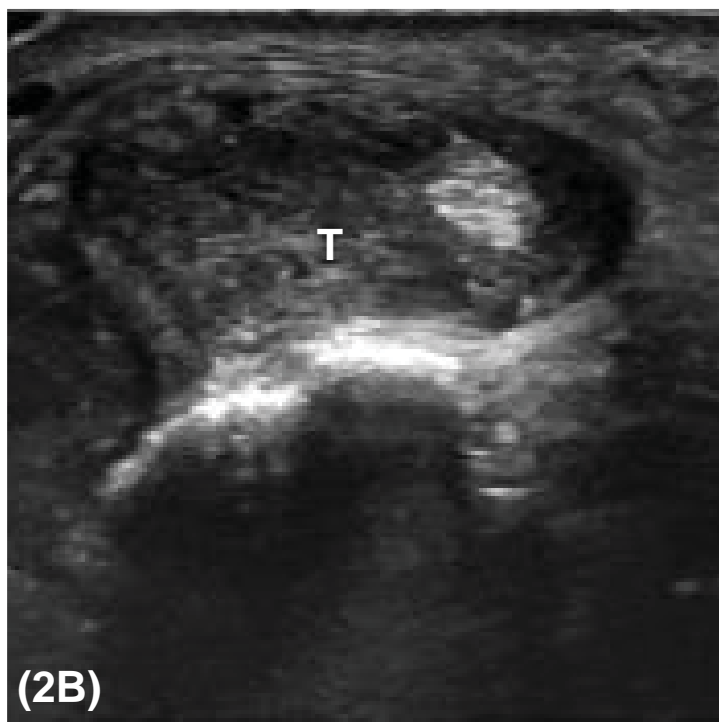
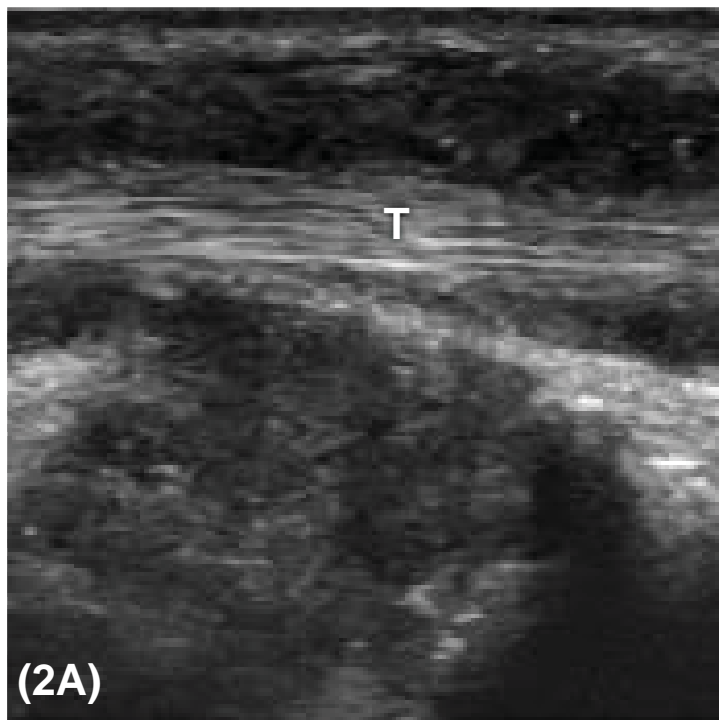
ECU tenosynovitis Longitudinal scan

Extensor carpi ulnaris (ECU) tenosynovitis. Longitudinal (1A) and transverse(1B) US scans of the ECU tendon in a RA patient with mild ECU tenosynovitis. The tenosynovium was thickened and hypoechoic, formed halo sign in transverse view(1B). Another RA patient with severe ECU tenosynovitis which presented marked tenosynovial hypertrophy in both longitudinal (2A) and transverse(2B) US scans. T: ECU tendon.

Lai, Kuo-Lung

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

Wrist



RA

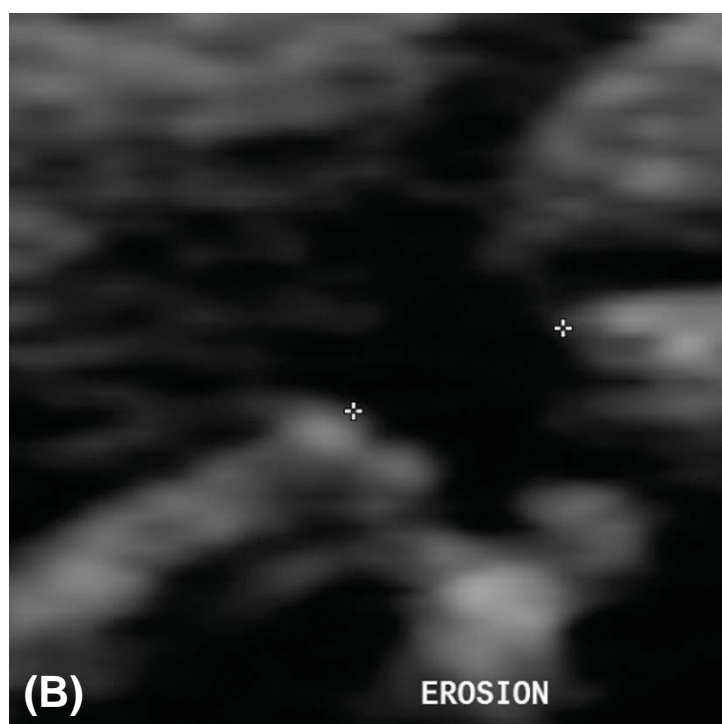
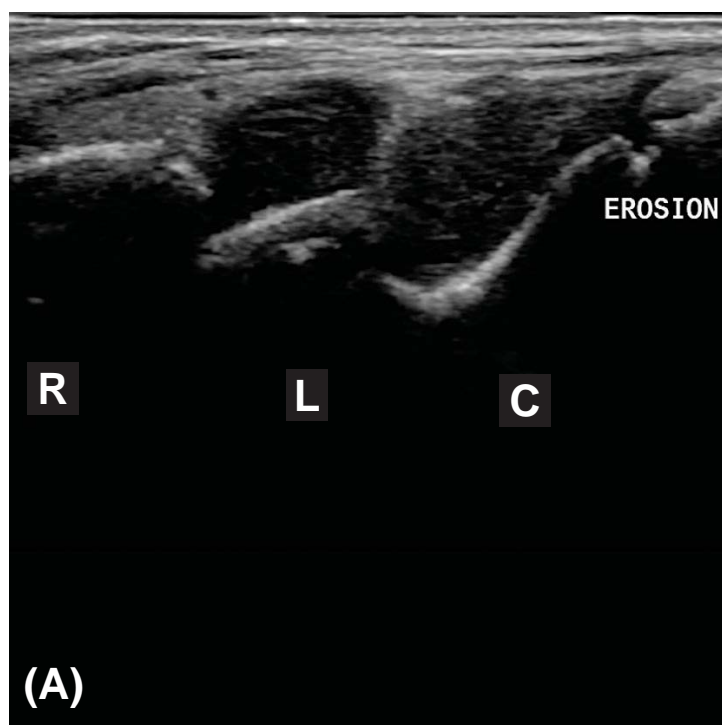
ECU tenosynovitis Longitudinal scan

Extensor carpi ulnaris (ECU) tenosynovitis. Longitudinal (1A) and transverse(1B) US scans of the ECU tendon in a RA patient with mild ECU tenosynovitis. The tenosynovium was thickened and hypoechoic, formed halo sign in transverse view(1B). Another RA patient with severe ECU tenosynovitis which presented marked tenosynovial hypertrophy in both longitudinal (2A) and transverse(2B) US scans. T: ECU tendon.

Lai, Kuo-Lung

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

Wrist



RA

Dorsal longitudinal scan (A) and amplified image for bony erosion (0.1461cm) (B).

Widening of radiocarpal joint capsule with synovial membrane proliferation and a bony erosion in capitate. PDUS showed a neovascularized vessel in synovium toward the erosive region.

R = radius

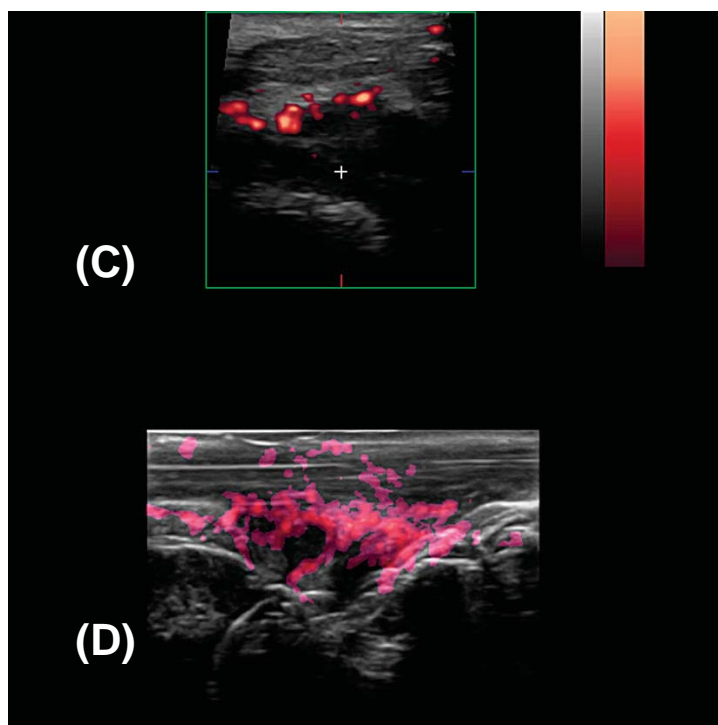
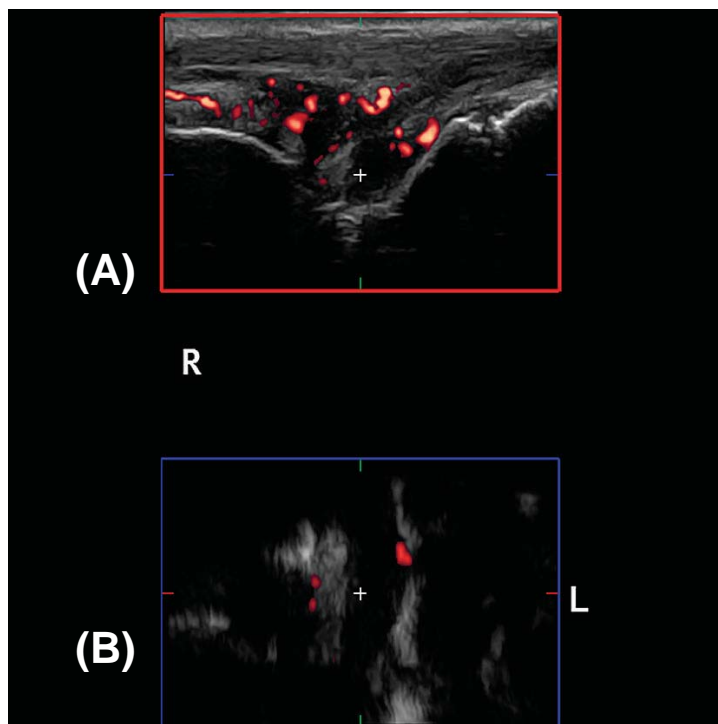
L = lunate

C = capitate

Chen, Hsin-Hua

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

Wrist



RA

Dorsal longitudinal (A) and reconstructed coronal (B), transverse (C) scan, with reconstructed 3D image (D).

Widening of Joint capsule of Radiolunate joint with synovial thickening and many power Doppler signals in the proliferated synovium.

R = radius

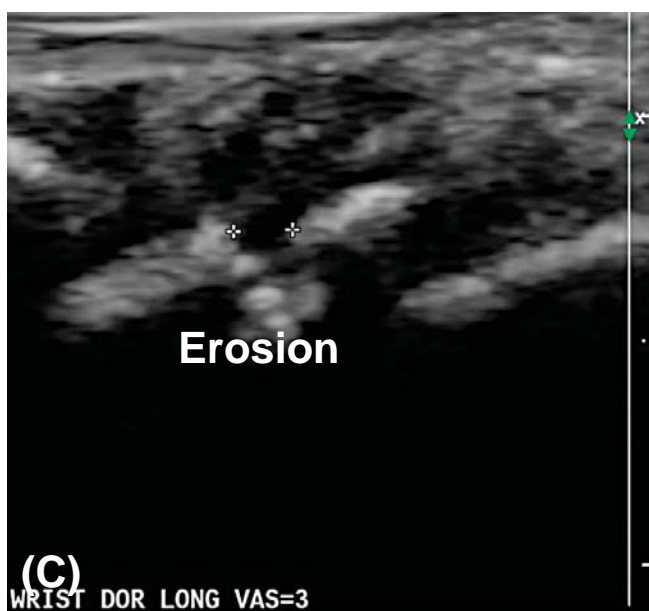
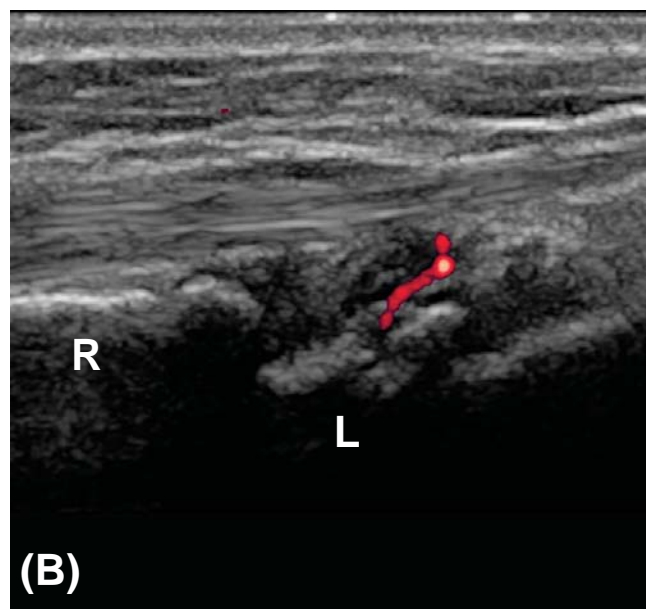
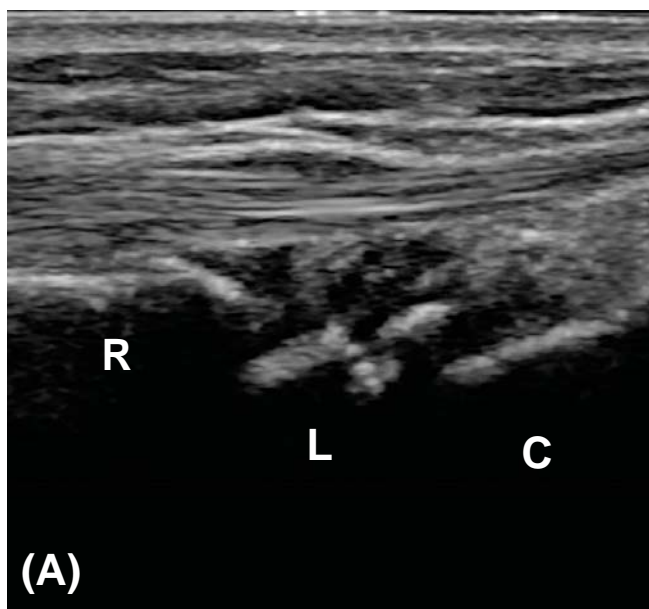
L = lunate

Chen, Hsin-Hua

3D Power Doppler US using a Philip iU22 with a with a volumetric probe (4D,5-13 MHz)

Wrist

RA



Anti-TNF Failure

Dorsal longitudinal scan (A) and Power Doppler image (B), amplified image for bony erosion (0.131cm) (C).

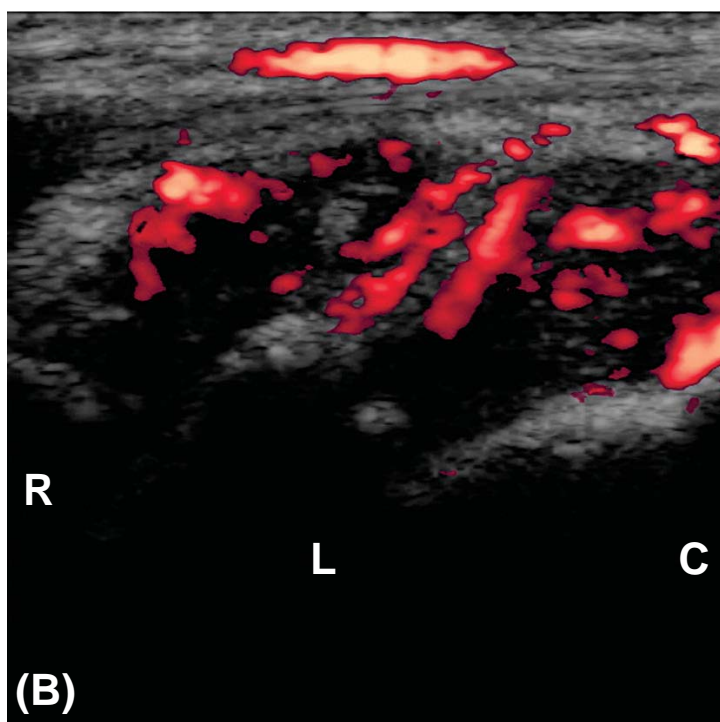
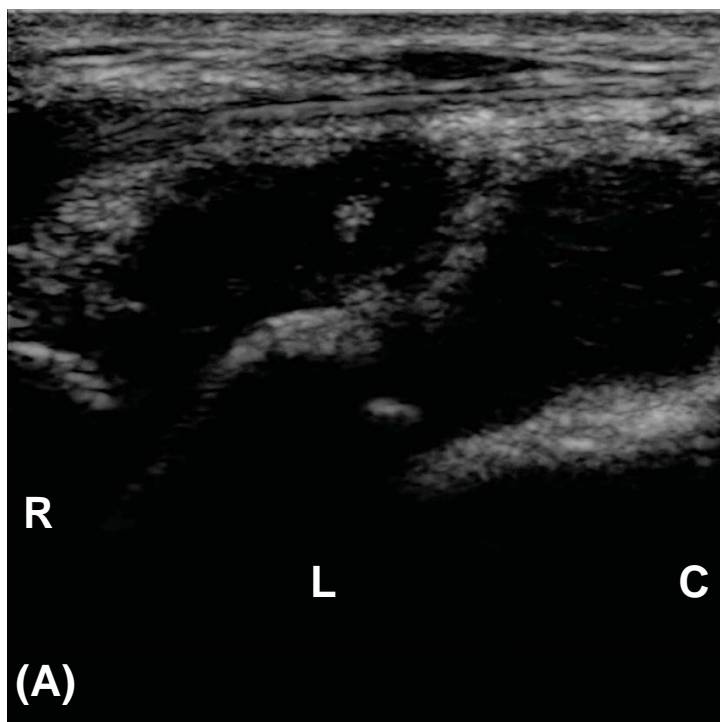
Widening of radiocarpal joint capsule with synovial membrane proliferation and a bony erosion in lunate. PDUS showed a neovascularized vessel in synovium toward the erosive region.

R= radius, L= lunate, C= capitate.

Chen, Hsin-Hua

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

Wrist



RA

Dorsal longitudinal scan (A) and Power Doppler image (B).

Widening of radiocarpal joint capsule with synovial membrane proliferation. PDUS showed a marked hypervascularity within the joint capsule.

R = radius

L = lunate

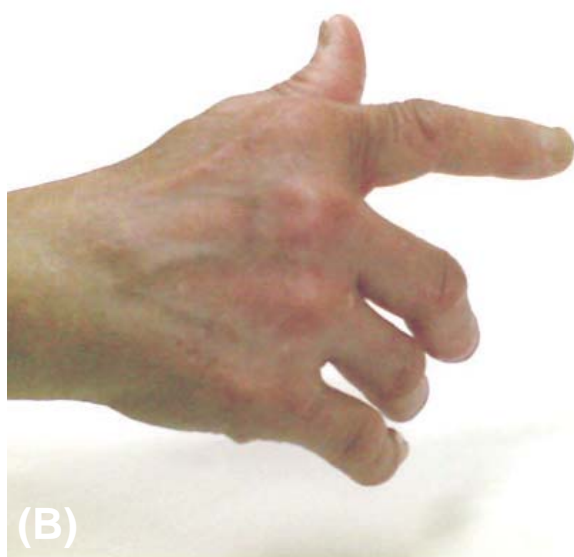
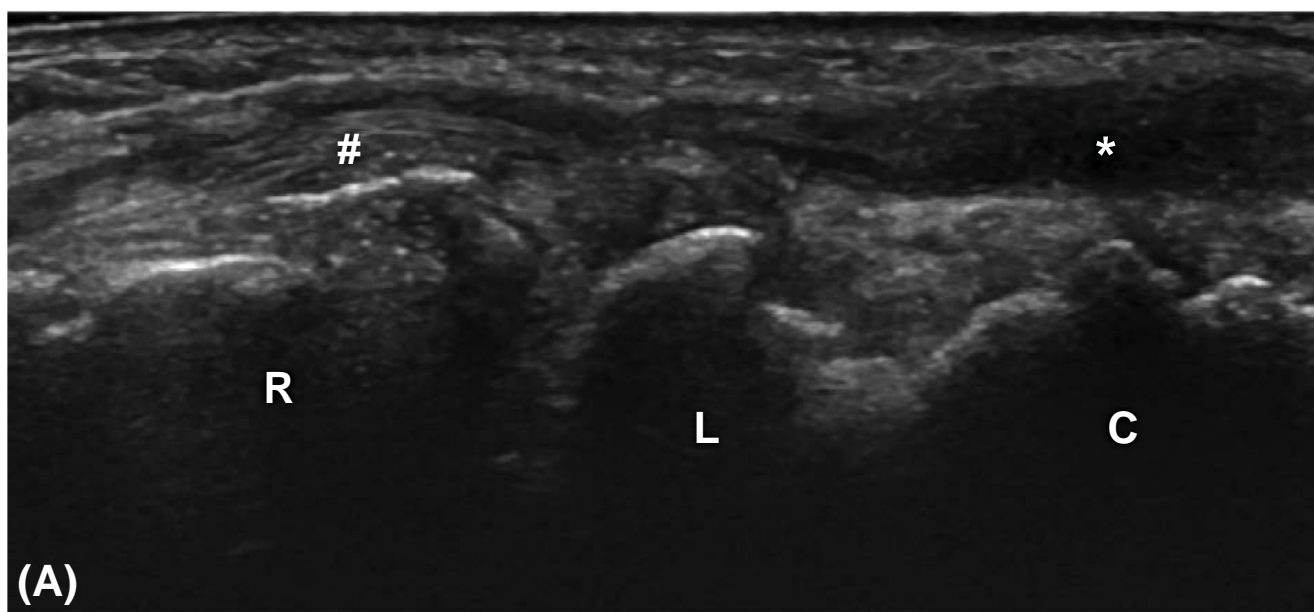
C = capitate

Chen, Hsin-Hua

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

Wrist

RA



RA

Extensor tendon rupture

Longitudinal scan

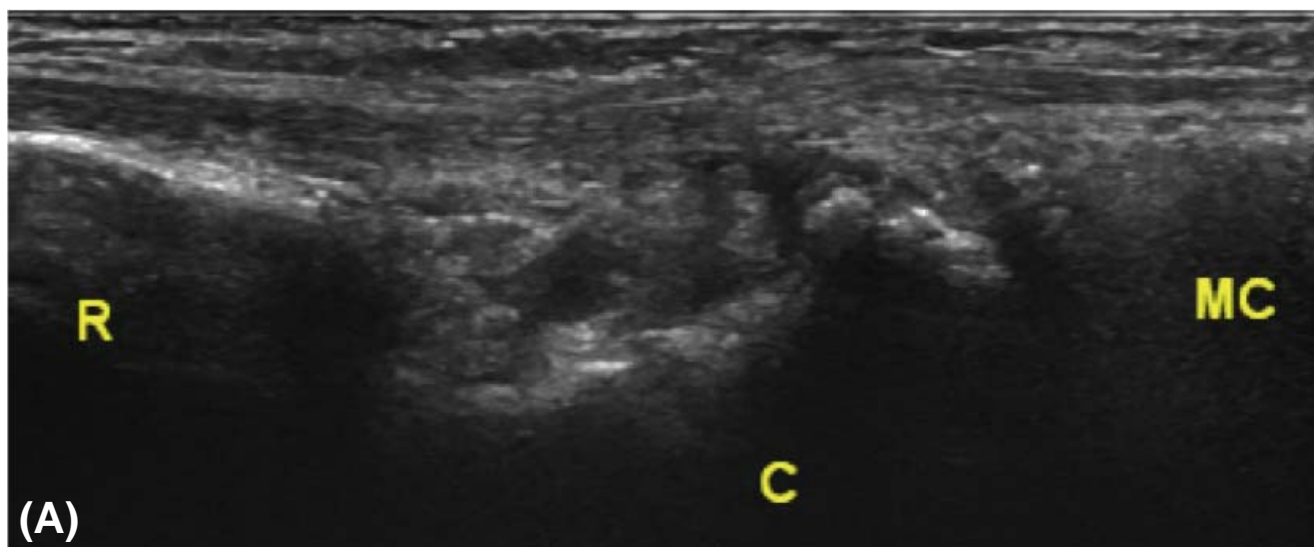
Extensor tendon rupture in RA. (A) Longitudinal US scan of the dorsal wrist. Absence of ED tendon at the distal portion(*). Retraction of the ruptured ED tendon(#) was found. (B) The patient could not extend the 3rd, 4th and 5th fingers. ED: extensor digitorum tendon, R: radius, L: lunate, C: capitate.

Lai, Kuo-Lung

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

Wrist

RA



Carpal bone ankylosis Longitudinal scan

Carpal bone ankylosis in RA. (A) Longitudinal scan at dorsal aspect of wrist showed cortex irregularity and ankylosis of carpal bones. The lunate-capitate junction was ill-defined. (B) X-ray of the same wrist. R: radius, C: carpal bone, MC: 3rd metacarpal bone.

Lai, Kuo-Lung

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

Shoulder

Elbow

Wrist

Hand

Hip

Knee

Ankle

Foot

Others