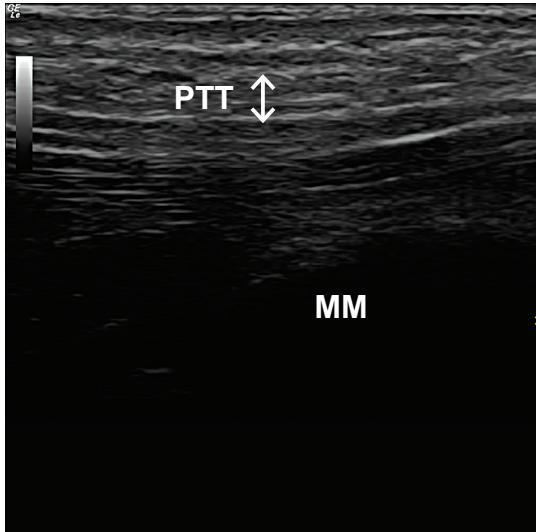


Ankle

Healthy Subject
RA
SpA
Crystal-related
Other Diseases

Ankle



Healthy Subject

Longitudinal scan over
medial aspect of ankle

PTT = posterior tibialis
tendon

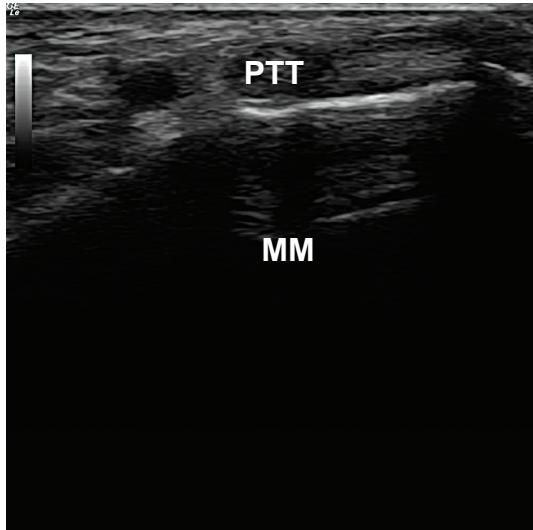
MM = medial malleolus



Chang, Chi-Ching

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

Ankle



Healthy Subject

Transverse scan over
medial aspect of ankle

PTT = posterior tibialis
tendon

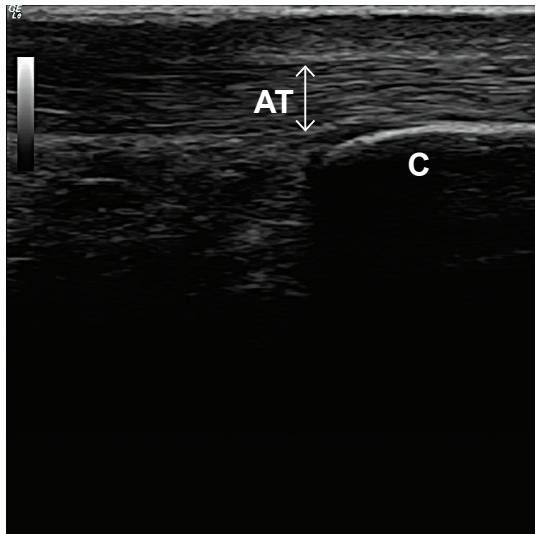
MM = medial malleolus



Chang, Chi-Ching

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

Ankle



Healthy Subject

Achilles tendon

Longitudinal scan

AT = Achilles tendon

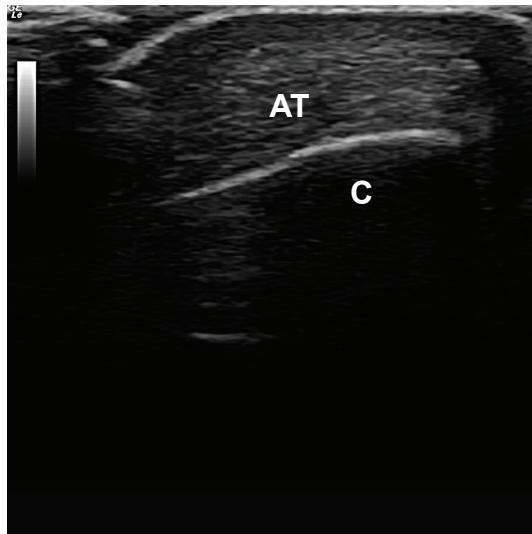
C = calcaneus



Chang, Chi-Ching

Grey scale US using a Logiq 5 (General Electrics)

Ankle



Healthy Subject

Achilles tendon

Transverse scan

AT = Achilles tendon

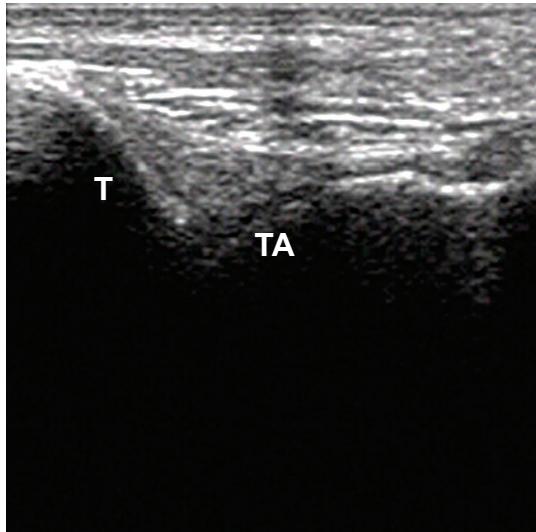
C = calcaneus



Chang, Chi-Ching

Grey scale US using a Logiq 5 (General Electrics)

Ankle



Healthy Subject

Tibiotalar joint

Dorsal longitudinal scan

T = tibial

TA = Talar



Chang, Chi-Ching

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

Ankle

Shoulder

Elbow

Wrist

Hand

Hip

Knee

Ankle

Others

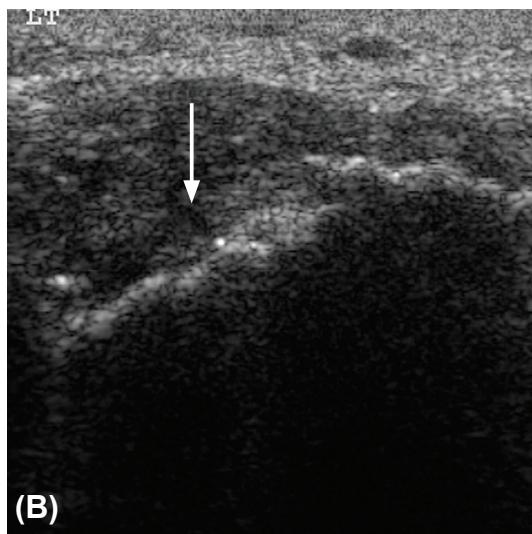
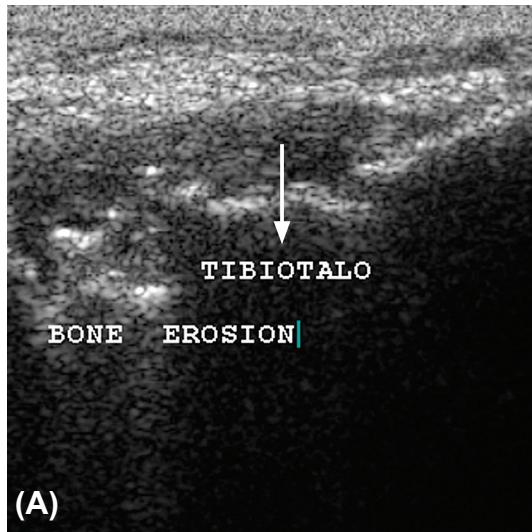
Foot

RA

Tibiotalar joint

Dorsal longitudinal (A) and transverse (B) scan

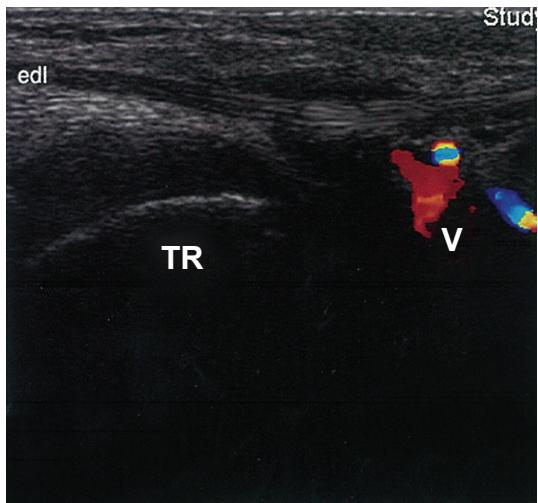
Bone erosion. The longitudinal view shows Interruption of bone cortex (arrow) in talar bone



Chang, Chi-Ching

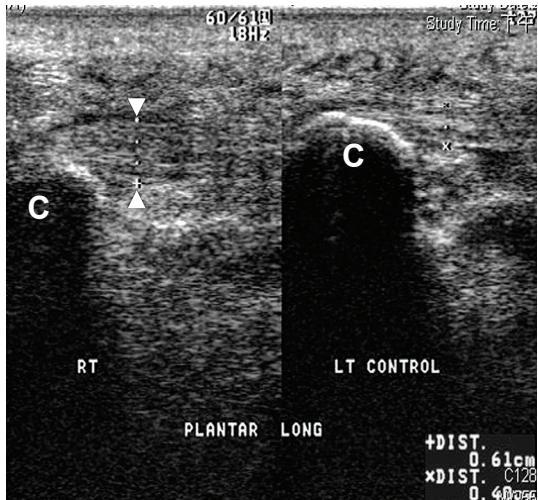
Grey scale US using a Taitan 180

Ankle



Lin, Liang-Hung

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



Tsai, Wen-Pin

Aloka 5500

RA

Right ankle joint

Anterior longitudinal scan

Proliferative synovitis.

Hypoechoic fluid surrounds extensor digitorium longus tendon. Increase vascularity and synovium proliferation.
edl = extensor digitorium longus

TR = tarsal bone

V = increased vascularity

SpA

Ankylosing Spondylitis with Plantar Fasciitis

Longitudinal scan of planta facial

Thickening of plantar fascia (between arrowhead)
C = calcaneus

RT

LT CONTROL

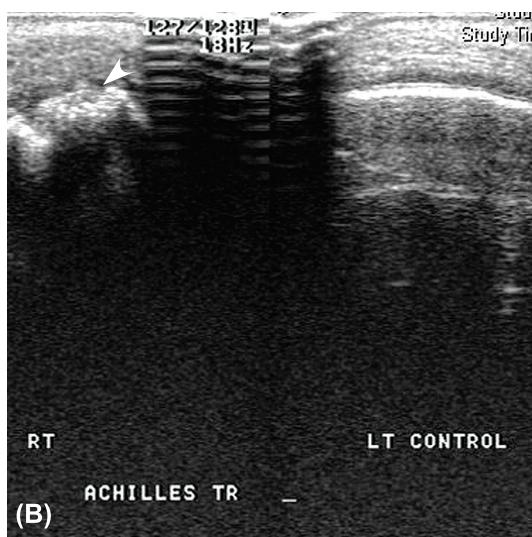
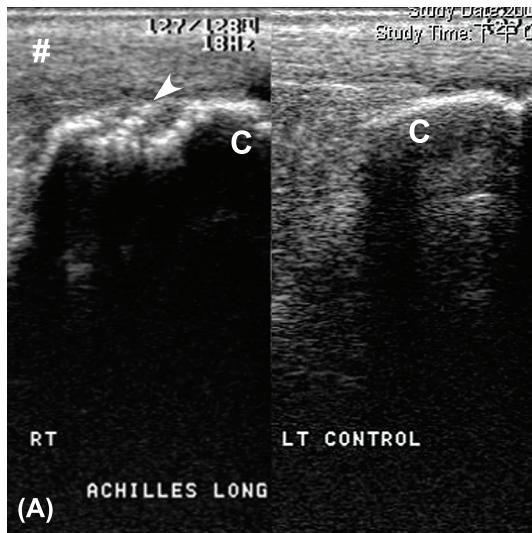
PLANTAR LONG

+DIST. 0.61cm
xDIST. 0.40mm
Study Time: 1:22

RT = abnormal

LT = normal

Ankle



SpA

Ankylosing Spondylitis, Calcaneal Enthesopathy

Longitudinal (A) and transverse (B) scan of Heel

Calcaneal bony erosion (arrow head) and hypoechoic thickening of right Achilles tendon (#);

C = Calcaneus

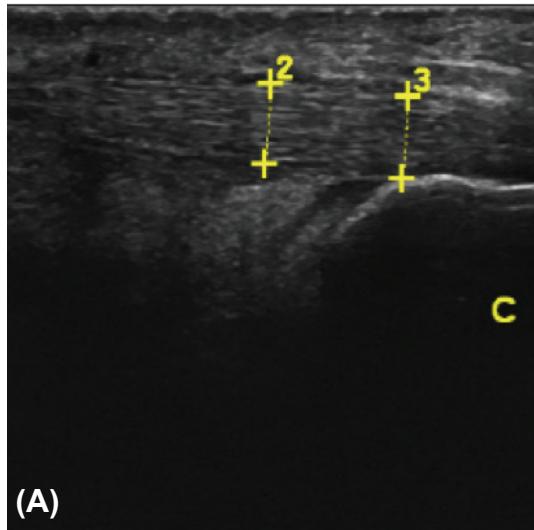
RT = abnormal

LT = normal

Tsai, Wen-Pin

Aloka 5500

Ankle

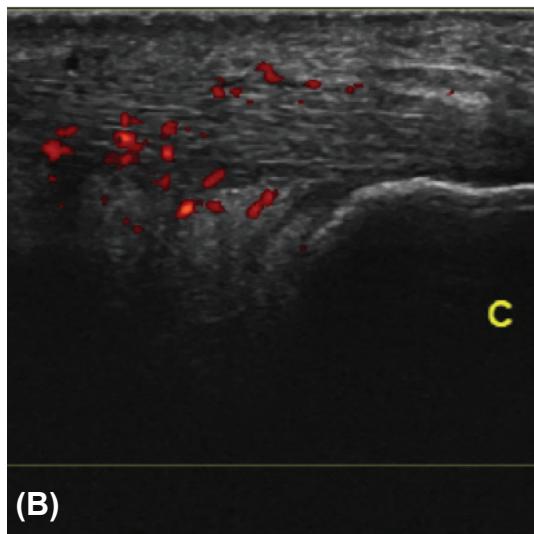


SpA

Achilles enthesitis

Longitudinal scan of Achilles tendon

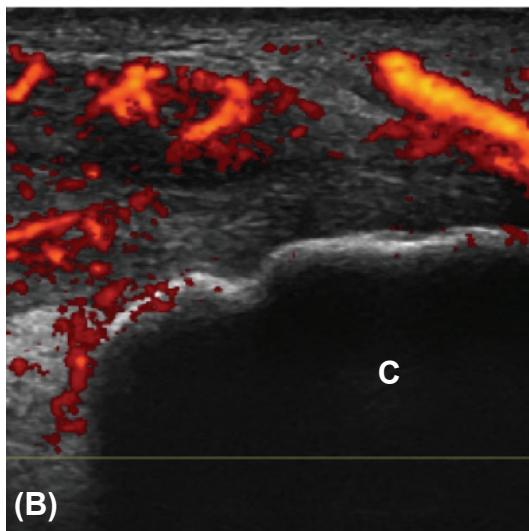
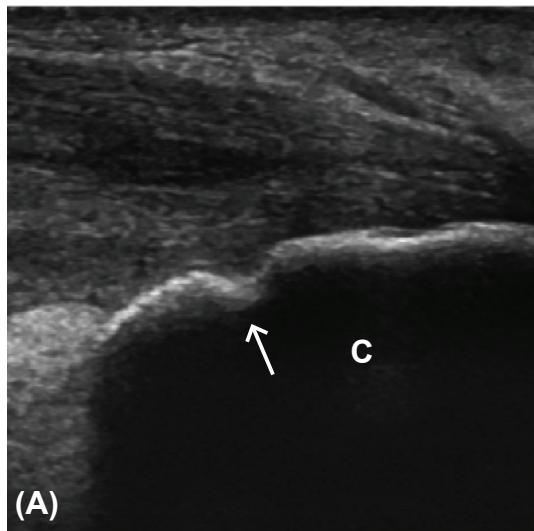
Achilles enthesitis. (A) The insertion of Achilles tendon had swelling (at mark 3) and decreased echogenicity on longitudinal gray scale US, and (B) increased vascularity on power Doppler US. C: calcaneus.



Lai, Kuo-Lung

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

Ankle



SpA

Achilles enthesitis

Longitudinal scan of Achilles tendon

Achilles enthesitis. (A) The insertion of Achilles tendon had swelling and decreased echogenicity on longitudinal gray scale US, and (B) increased vascularity on power Doppler US. A calcaneal bone erosion (arrow) was noted. C: calcaneus.

Lai, Kuo-Lung

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

Shoulder

Elbow

Wrist

Hand

Hip

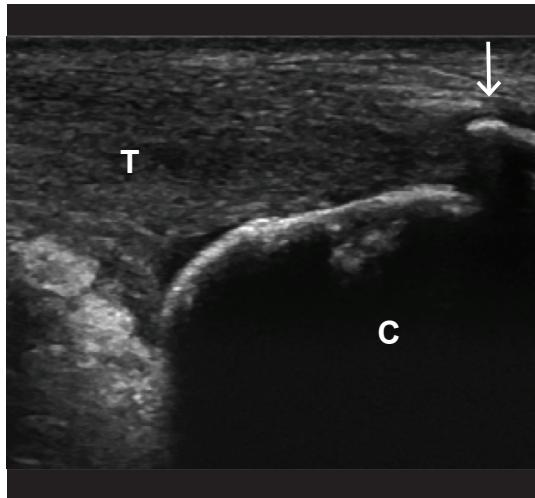
Knee

Ankle

Foot

Others

Ankle



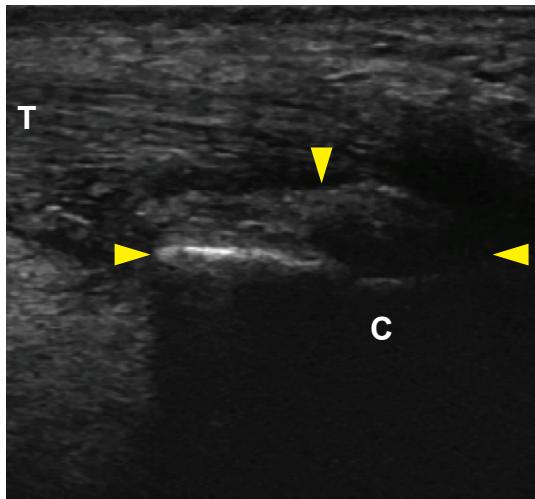
SpA

Achilles enthesopathy Longitudinal scan of Achilles tendon

Achilles enthesopathy. Longitudinal US scan showed a enthesophyte (arrow) with acoustic shadow. The insertion of Achilles tendon had swelling and decreased echogenicity. T: Achilles tendon, C: calcaneus.

Lai, Kuo-Lung

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



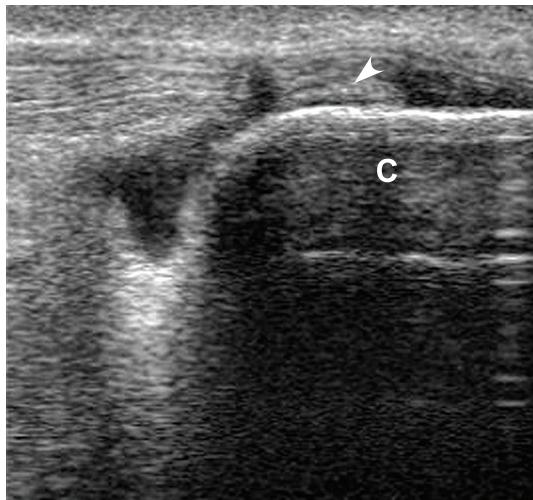
Crystal -related Gouty Achilles tendinitis Longitudinal scan of Achilles tendon

Achilles gouty tendinitis mimic enthesitis. Longitudinal US scan showed tophi (arrowheads) with hypoechoic rim at the insertion of Achilles tendon. The tendon was swollen. T: Achilles tendon, C: calcaneus.

Lai, Kuo-Lung

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

Ankle



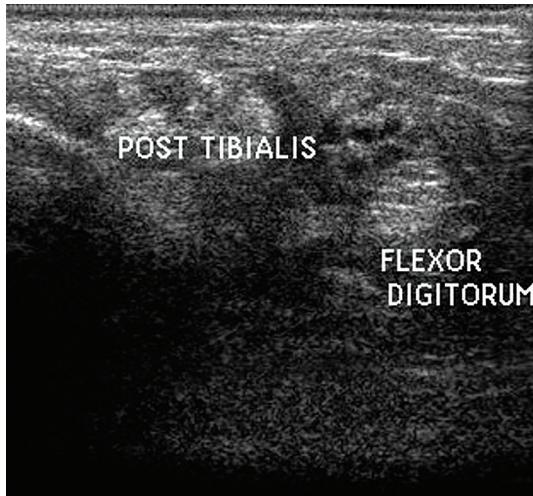
Tsai, Wen-Pin

Aloka 5500

Crystal-related Tophaceous Gout

Longitudinal scan of Heel

Tophaceous mass(arrow head) located between Achilles tendon and calcaneus(C)



Crystal-related Chronic Tophaceous Gout

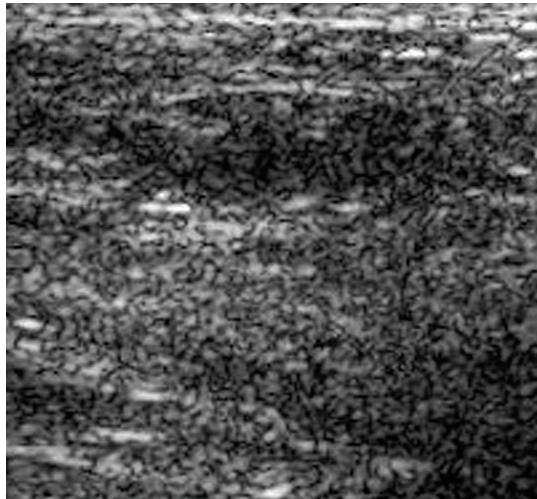
Transverse scan of medial ankle

Rounded tophaceous depositss surrounded the post tibialis

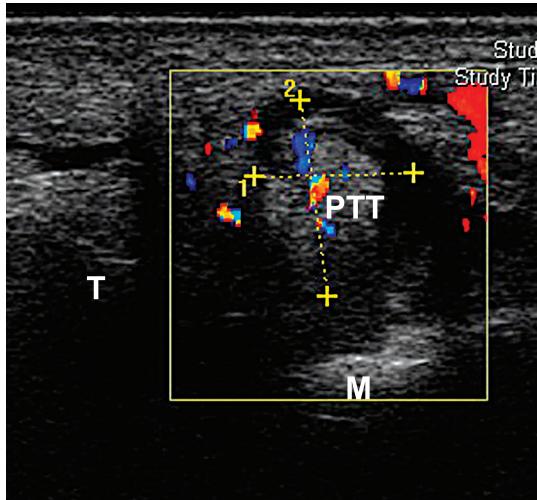
Kuo, Chang-Fu

Grey scale US using a Logiq 5 (General Electrics)

Ankle



Chen, Ying-Chou
Grey scale US using CGM OPUS 5000



Lin, Jing-Chi
Philips En Visor C HD

Crystal-related Chronic Tophaceous Gout

Longitudinal scan of Heel

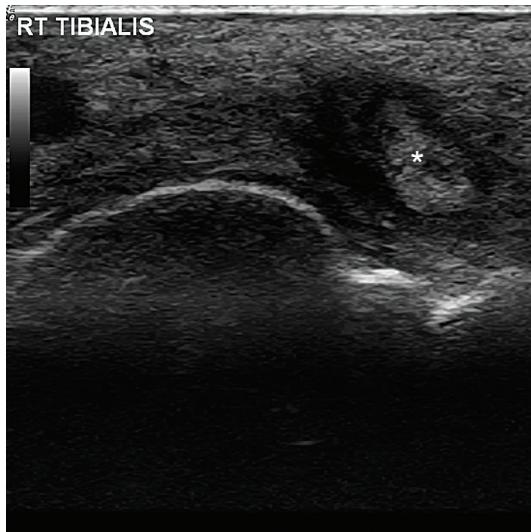
"Snowstorm" pattern characterized by rounded aggregates of variable echogenicity, superimposed on "urate sand"

Crystal-related Tenosynovitis

Transverse scan of medial ankle

Widening of tendon sheath, PDS show increased vascularity
PTT = post tibial tendon;
T = tibial;
M = malleolus

Ankle



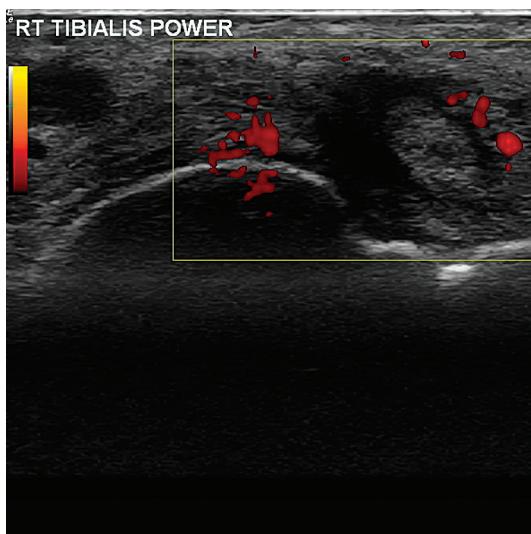
Other Diseases

Ankle Sprain

Tibialis tendon(*)

Transverse scan

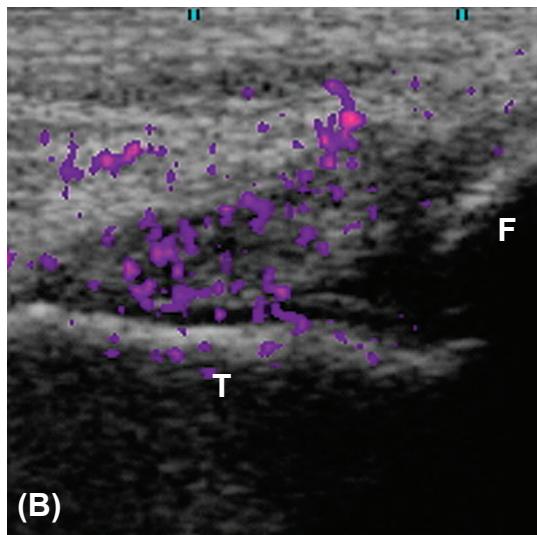
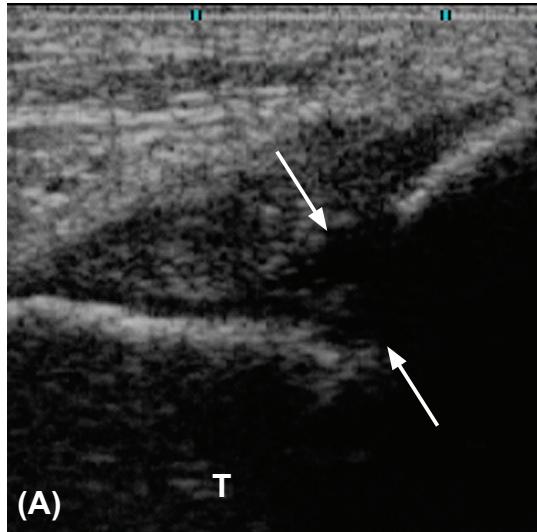
Extended tendon sheath with marked fluid accumulation, constituting a typical target sign. High vascularity was found by power doppler mode.



Kuo, Chang-Fu

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

Ankle



Other Diseases

Ankle Sprain (ATFL tendinitis)

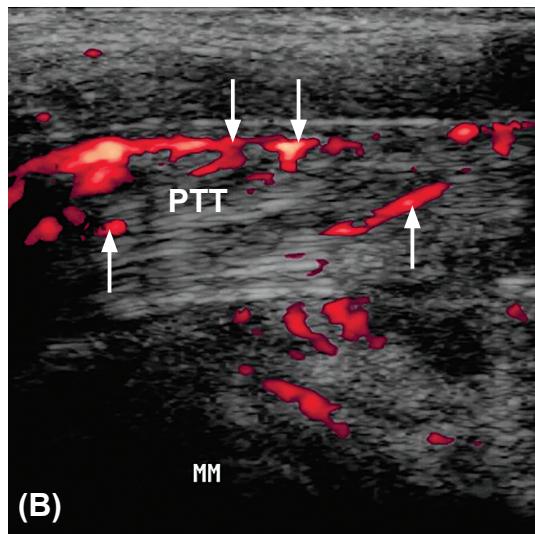
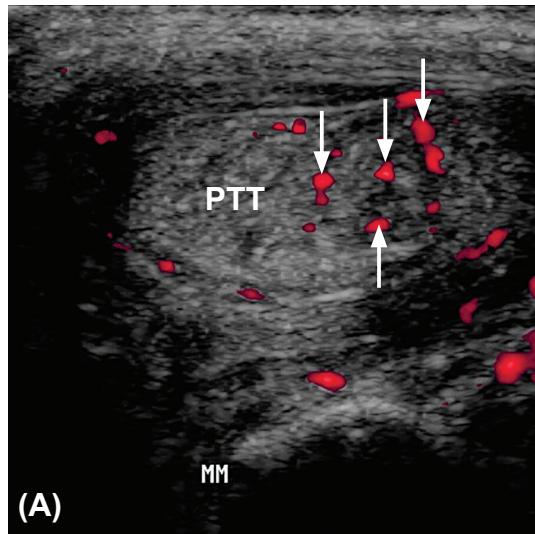
Longitudinal scan over anterior talofibular ligament (ATFL) (A) and power Doppler image (B).

Increased thickness of ATFL with hypoechoogenicity.
PDUS shows some Doppler signals in the ligament.

Chen, Hsin-Hua

Grey scale and power Doppler US using a Logiq 500 (General Electrics Medical Systems, Milwaukee, WI) with a linear probe (7-12MHz)

Ankle



Other Diseases

Ankylosing Spondylitis

Ankle

Transverse (A) and longitudinal scan (B) over medial aspect of ankle

(A) Note the ovoid hyperechoic posterior tibialis tendon (PTT) in the centrum of the power Doppler US image using transverse scan. The tendon is widened with some hypoechoic lesions inside, which reveal many power Doppler signals (arrows), suggesting active tendinitis rather than tenosynovitis.

(B) Longitudinal scan over the corresponding region.

PTT = posterior tibialis tendon

MM = medial malleolus

Chen, Hsin-Hua

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

Memo