Coronal (a) and axial (b) proton-density MRI showing a non-specific low density lateral ankle mass.
Clinical History

36 year old male with known osteochondral lesion of the medial talar dome, presenting with slow onset of lateral ankle pain and palpable fullness.
Ultrasound imaging demonstrates a well-defined hypoechoic soft tissue mass arising from the lateral tibiotalar joint.
Ultrasound with Power Doppler demonstrates extensive internal vascularity of the mass.
Ultrasound images obtained during percutaneous biopsy using a 14 gauge core biopsy device (arrows) yielding 5 core samples for pathologic analysis.
Discussion

Nodular Pigmented Villonodular Synovitis arising from the lateral tibiotalar joint
Discussion

- Pigmented Villonodular Synovitis (PVNS) was first described in 1941.

- It is a pathologic condition of the synovium that may affect any joint, but is most commonly seen in the knee and hip.

- It is a benign proliferative disorder of unknown etiology characterized by hemosiderin deposition within the thickened synovium.

- The process is slow-growing and benign but locally invasive and can be very painful.
Discussion

- 2 types- diffuse (throughout the joint) or nodular (localized to one area).
- For joint involvement, surgical excision is the treatment of choice.
- When involving a tendon sheath, the process is referred to as Giant Cell Tumor of Tendon Sheath.