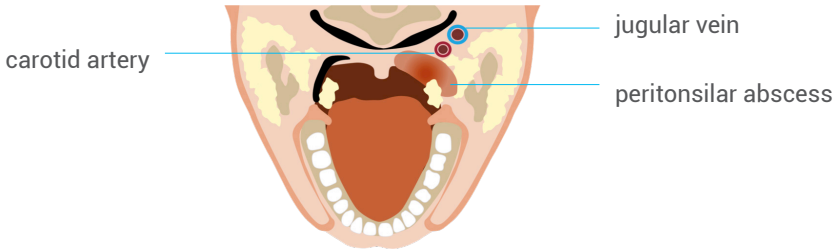
Musculoskeletal imaging

DIAGNOSING PERITONSILLAR ABSCESS

Sore throat is a common acute care complaint, and peritonsillar abscess (PTA) is an important diagnostic consideration.

Point-of-care ultrasound is a radiation free way to help determine if a drainable PTA is present. Ultrasound can also help identify the important vascular structures near a PTA and guide plans for incision and drainage.



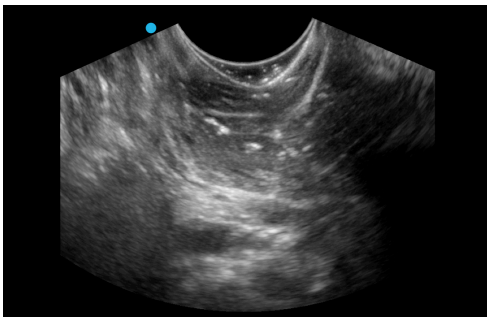
Technique

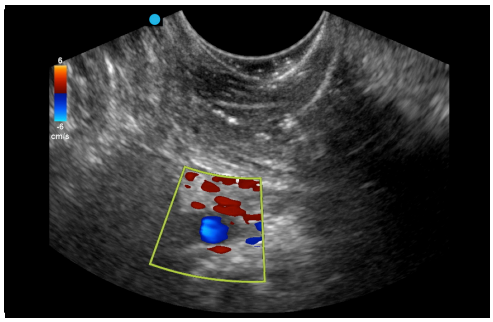
An intraoral or a transcutaneous approach can be used to evaluate for a PTA.

Intraoral

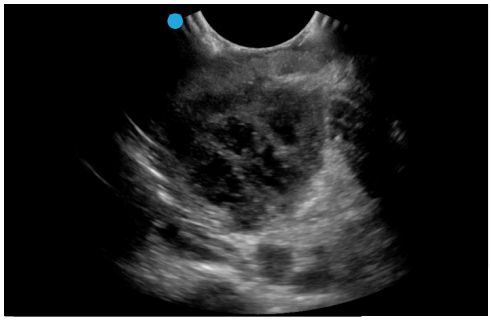
Insert an intracavitary transducer, covered in a glove or probe sheath, toward the peritonsillar space. Examine the unaffected then the affected side. Fan through the space in a head to toe plane.

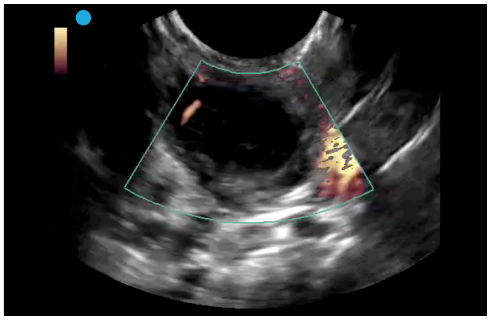
A normal tonsil is relatively hypoechoic with a hyperechoic hilum. The carotid can be seen deep to the tonsil with color Doppler.





A PTA will have mixed echogenicity, with anechoic areas indicating liquid, and purulent content.

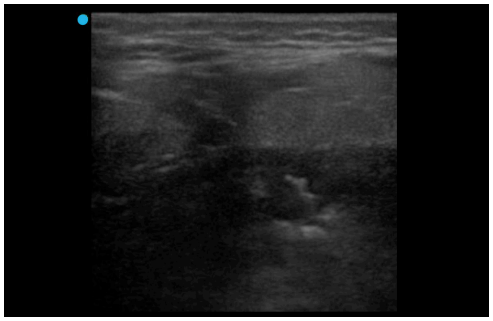




Transcutaneous

In patients with severe trismus or those unable to tolerate an intraoral probe, consider a transcutaneous or submandibular approach. Using a high frequency transducer placed inferior to the mandible, aim the probe towards the peritonsillar space.

A normal tonsil will appear hypoechoic with a hyperechoic hilum.



A PTA will again show anechoic regions indicating fluid or purulence.