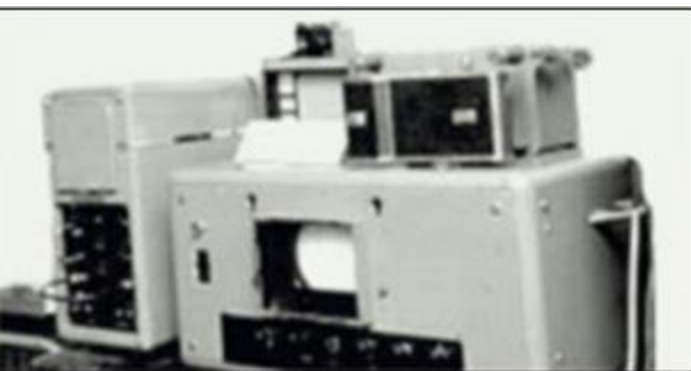


Acil Serviste USG Kullanımı

Uzm. Dr. Mehmet KOCABIYIK
Niğde Devlet Hastanesi



Canım biricik ultrasoncuğum...



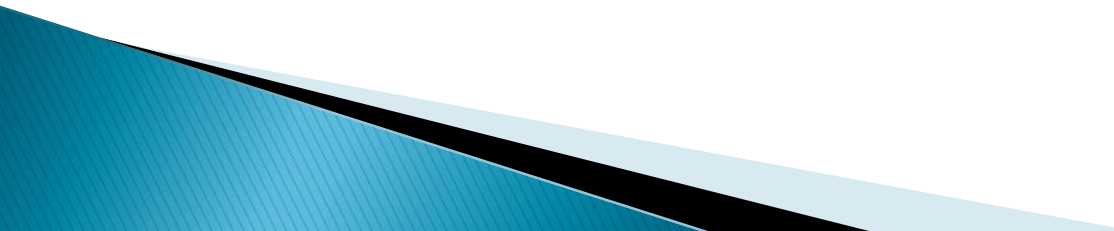
USG inceleme,

- ▶ Kesit görüntülerinin ardışık olarak izlendiği dinamik bir görüntüleme yöntemidir.
- ▶ Görüntüler hasta başında o esnada yorumlanır ve incelemeye yön verilir.

Bu nedenle US başarısı:

- yapan kişinin konsantrasyonu,
- el becerisi ve analiz yeteneği ile ilişkilidir.

USG cihazını kullanarak,

- ▶ Hastanın iç organlarının boyutunu, parankim yapısını, kanal sistemini,
 - ▶ Vasküler akım özelliklerini,
 - ▶ Anatamik boşluklardaki patolojik sıvı koleksiyonları
- 

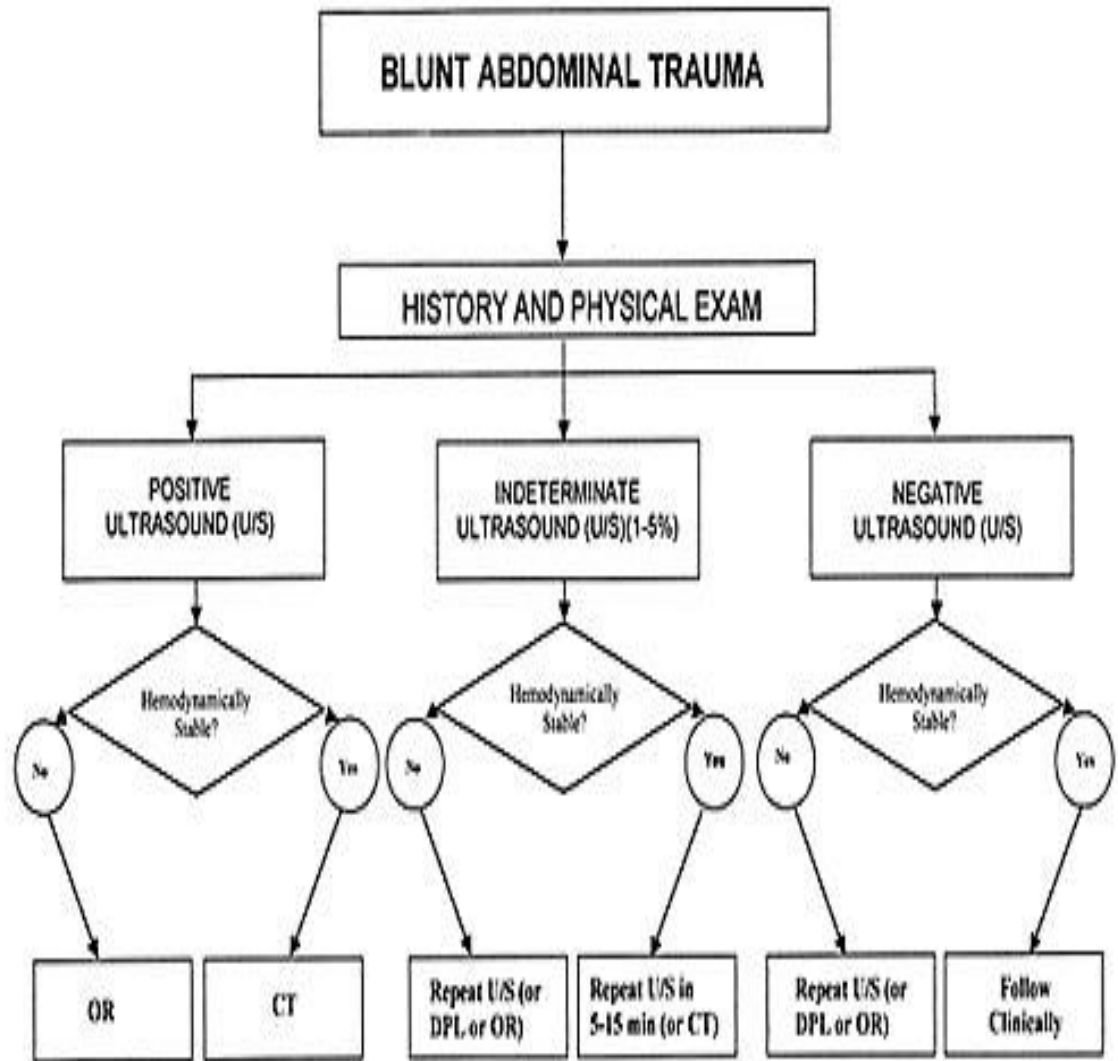
Avantajları:

- ▶ Düşük maliyet
- ▶ Aygıtın taşınabilirliği
- ▶ Yatağında inceleme imkanı (hasta konforu)
- ▶ Yöntemin uygulamadaki kolaylığı
- ▶ İncelemenin herhangi bir risk taşımaması (iyonize radyasyon vs.)
- ▶ Dinamik görüntülemeye izin vermesi

Tek dezavantaj, uygulayan kişinin bilgi ve becerisine bağımlı olması

Fast

- ▶ Focused
- ▶ Assessment with
- ▶ Sonography for
- ▶ Trauma



FAST / TRAUMA

SUBX 4C



RUQ



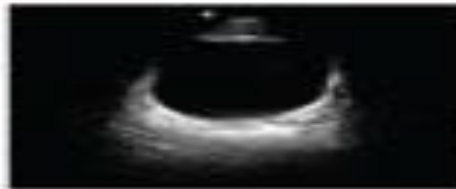
LUQ



PELVIS SAG



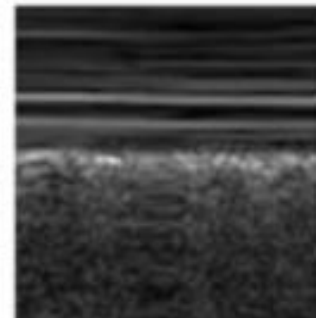
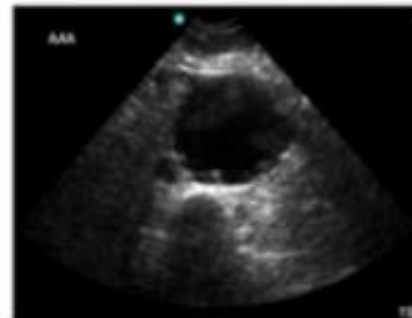
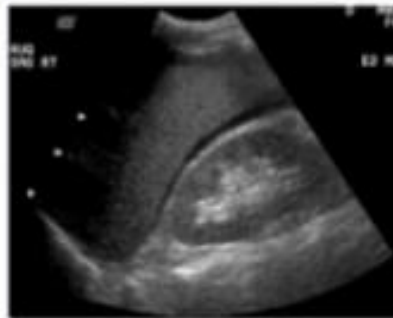
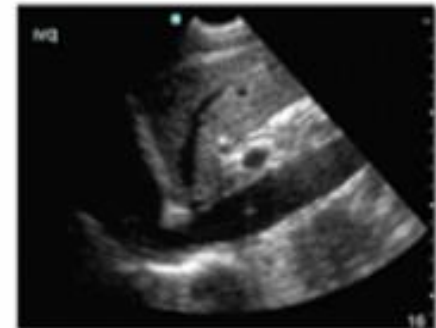
PELVIS TRV



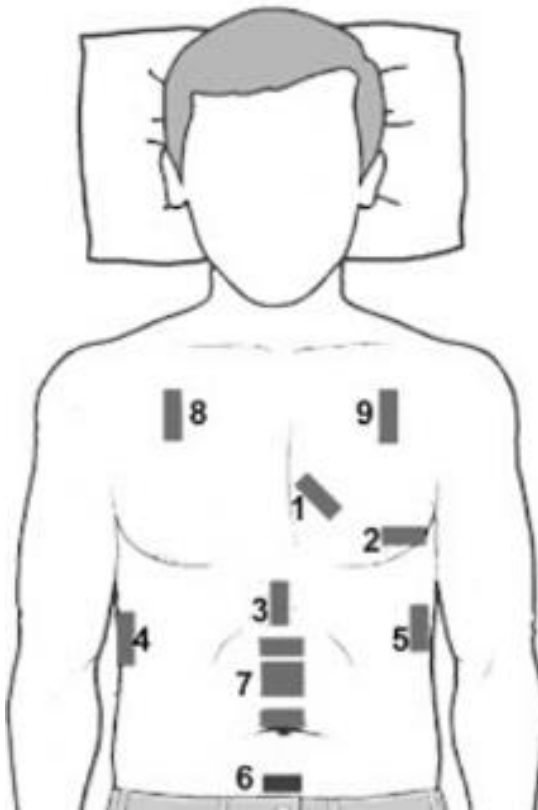
Rush

- ▶ **R**apid
- ▶ **U**ltrasound in
- ▶ **S**Hock

HI - MAP



Rush



RUSH Exam Sequencing

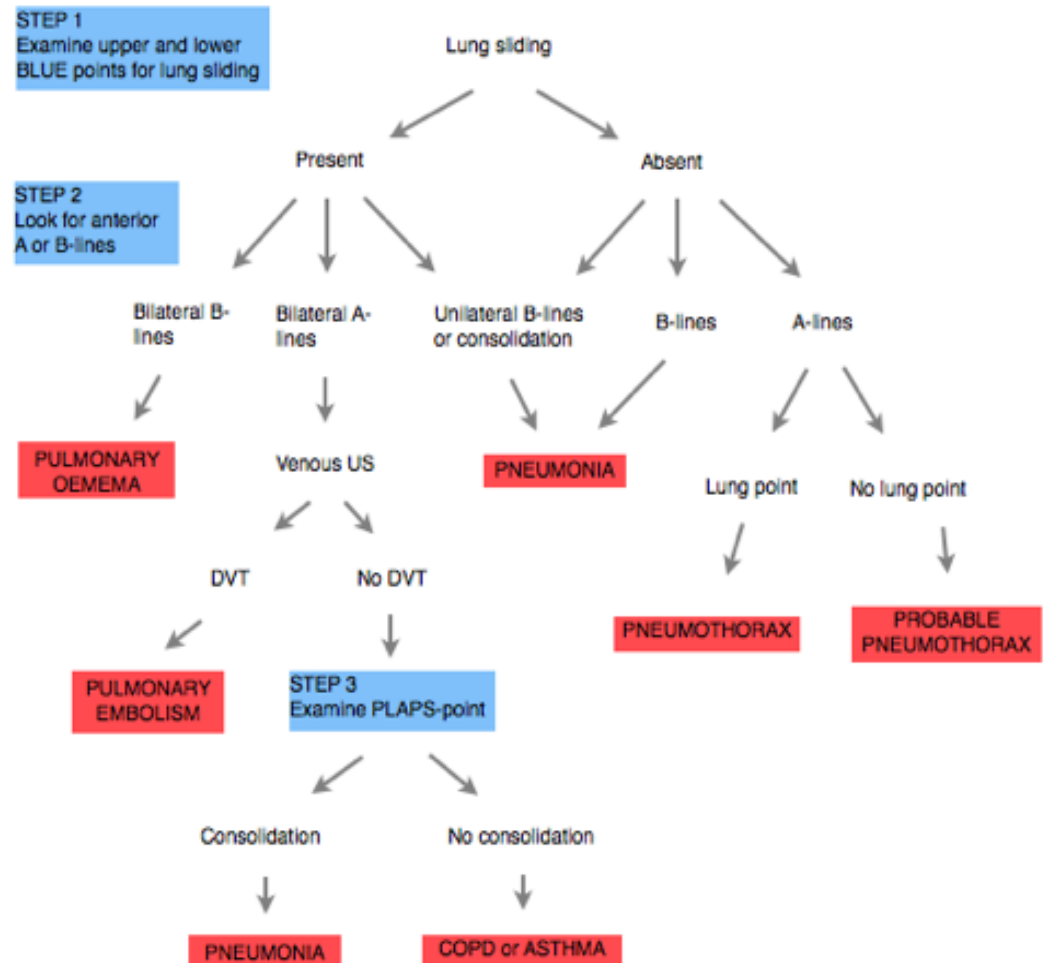
1. Parasternal Long Cardiac View
2. Apical Four-Chamber Cardiac View
3. Inferior Vena Cava View
4. Morison's with Hemothorax View
5. Splenorenal with Hemothorax View
6. Bladder View
7. Aortic Slide Views
8. Pneumothorax View
9. Pneumothorax View

Use Curvilinear Array for 1-7

Use High-Frequency Array for 8 & 9

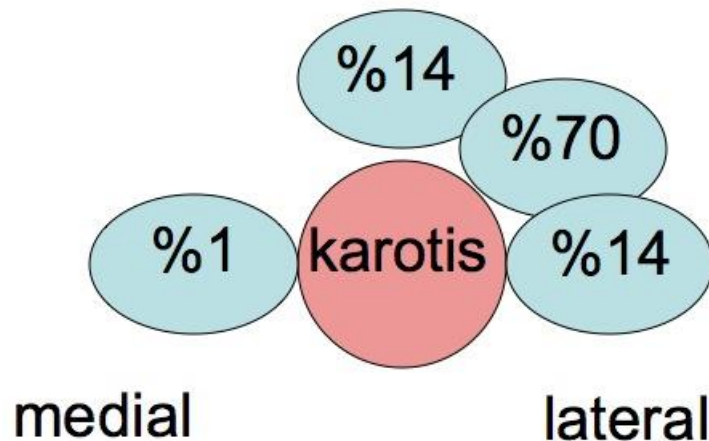
Akciğer USG

- ▶ Bedside
- ▶ Lung
- ▶ Ultrasound in
- ▶ Emergency



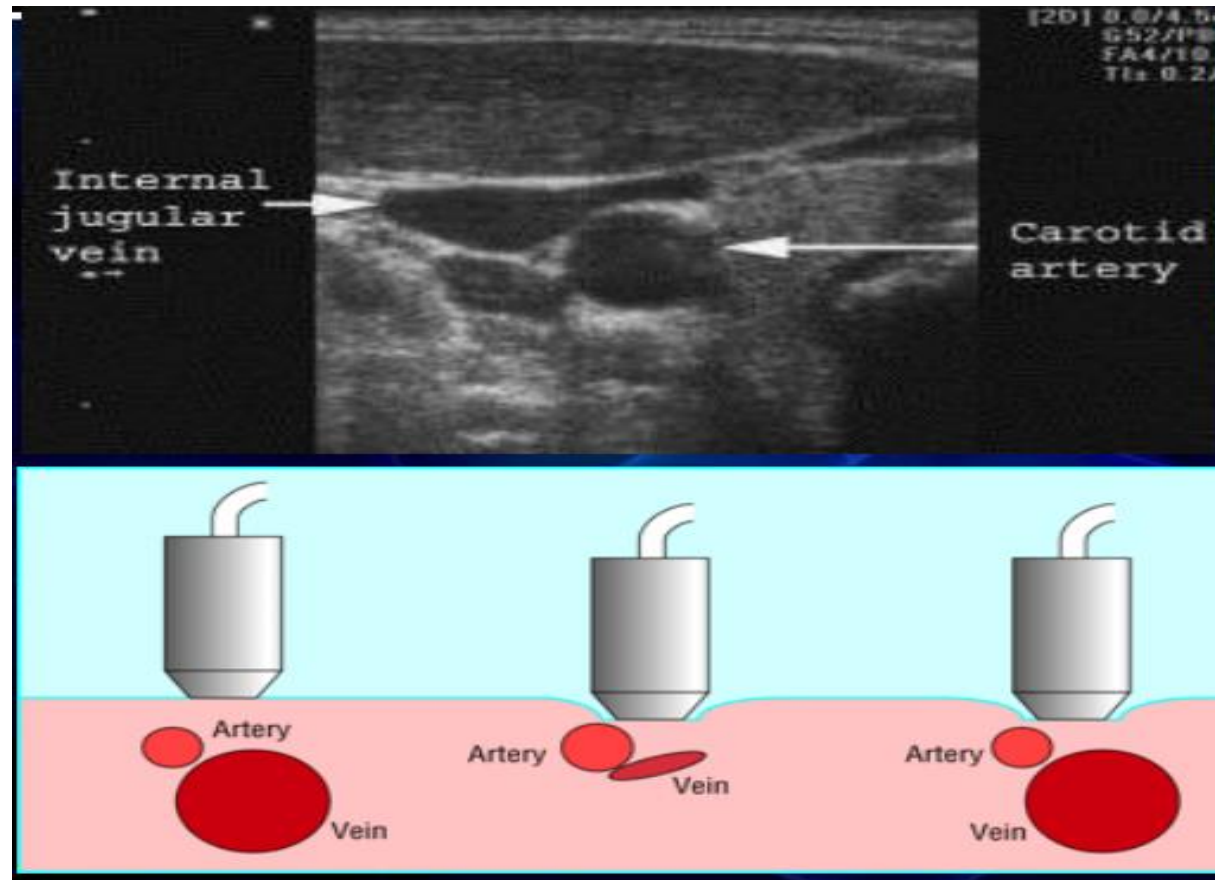
Santral Venöz Katater - USG

Karotis arter ve internal juguler ven



Study	Two dimensional ultrasonography (n/N)	Landmark method (n/N)	Relative risk (95% CI random)
Failed catheter placement (adults, internal jugular vein)			
Mallory et al 1990 ^{w9}	0/12	6/17	←■—
Nadig et al 1998 ^{w10}	0/36	13/37	←■—
Slama et al 1997 ^{w11}	0/37	10/42	←■—
Soyer et al 1993 ^{w12}	0/24	5/23	←■—
Sulek et al 2000 ^{w13}	3/60	5/60	—■—
Teichgräber et al 1997 ^{w14}	2/50	26/50	—■—
Troianos et al 1991 ^{w15}	0/77	3/83	←■—
Total (95% CI)	5/296	68/312	◆
Test for heterogeneity: $\chi^2=6.86$, $df=6$, $P=0.33$			

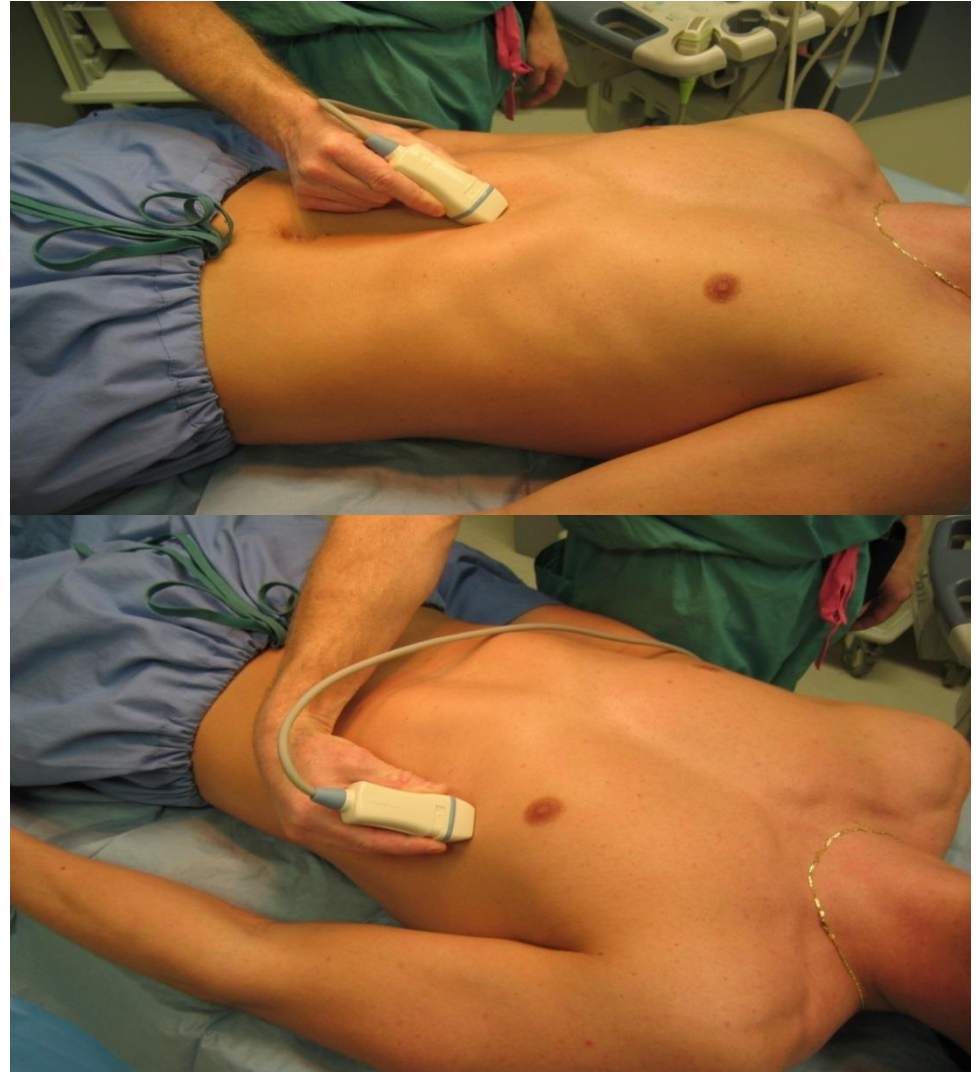
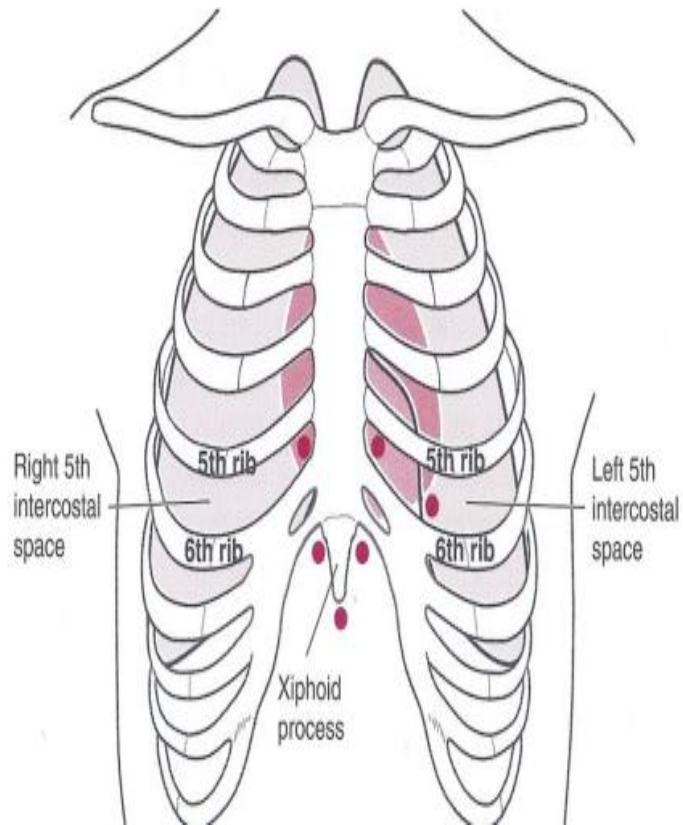
Santral Venöz Katater - USG



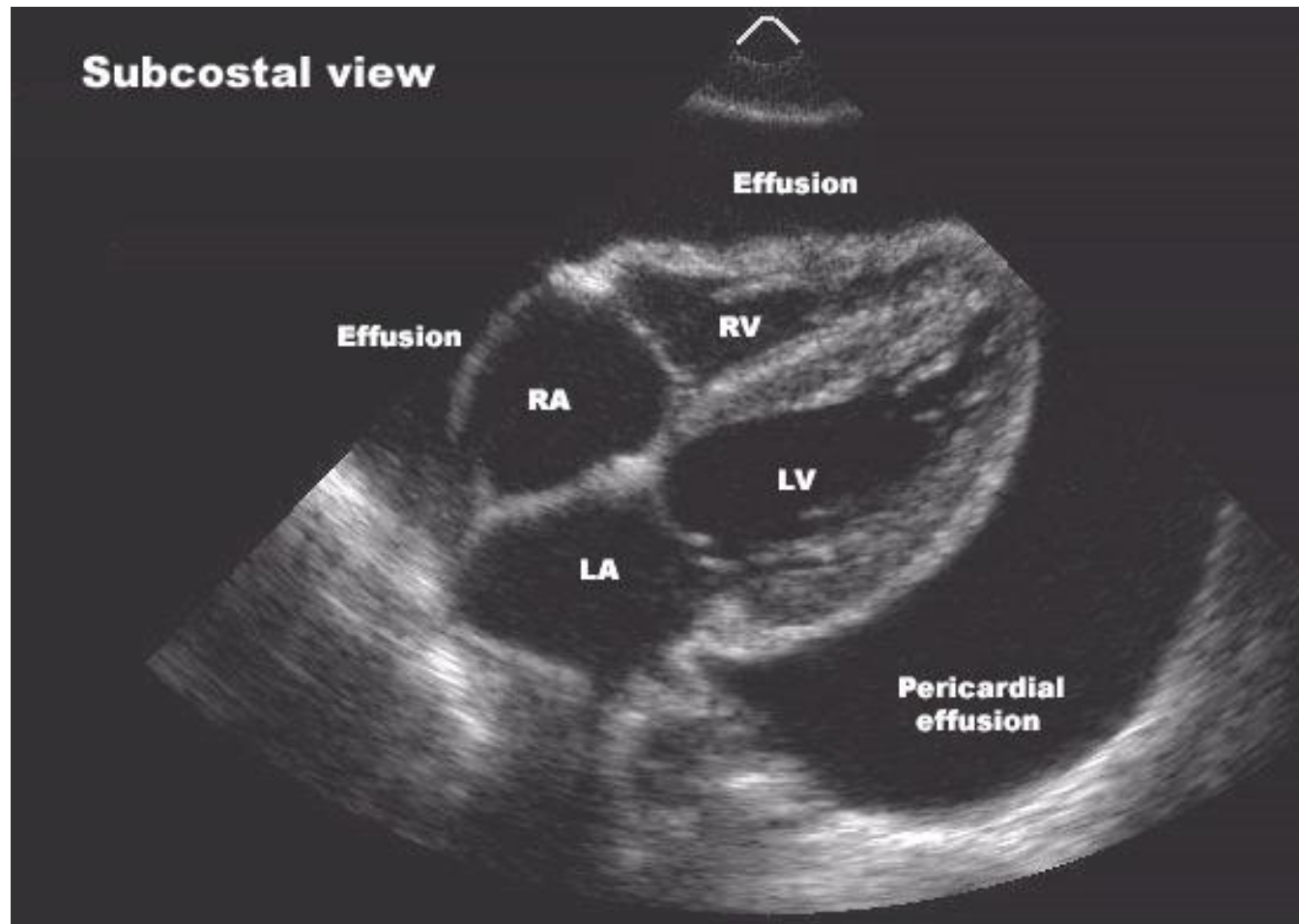
Santral Venöz Katater - USG



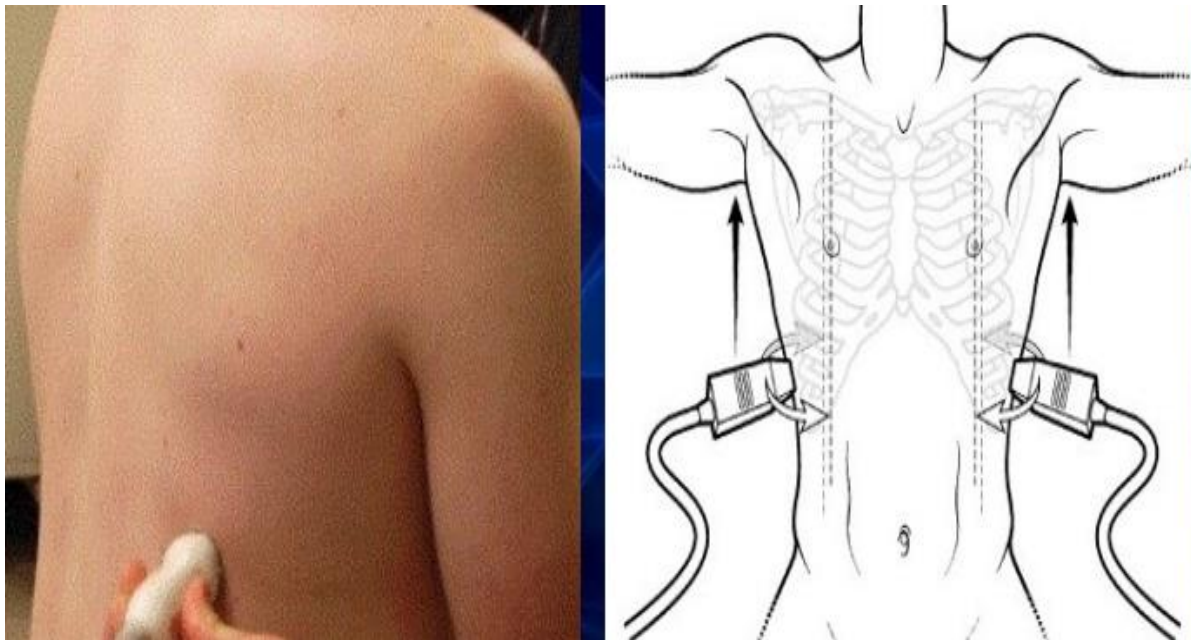
Perikardiyosentez - USG



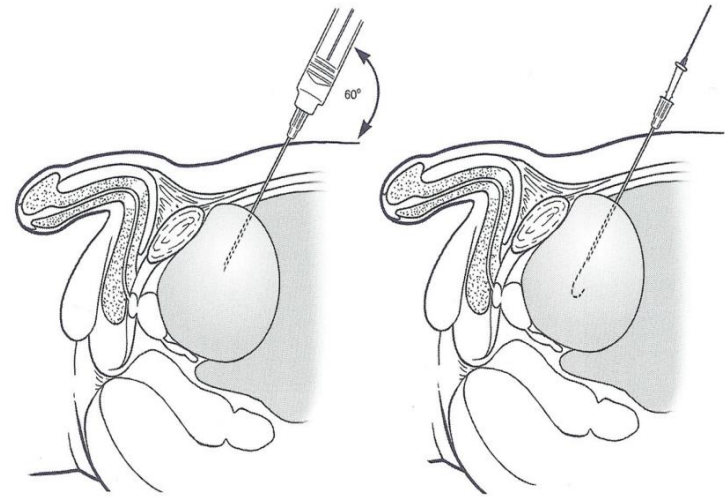
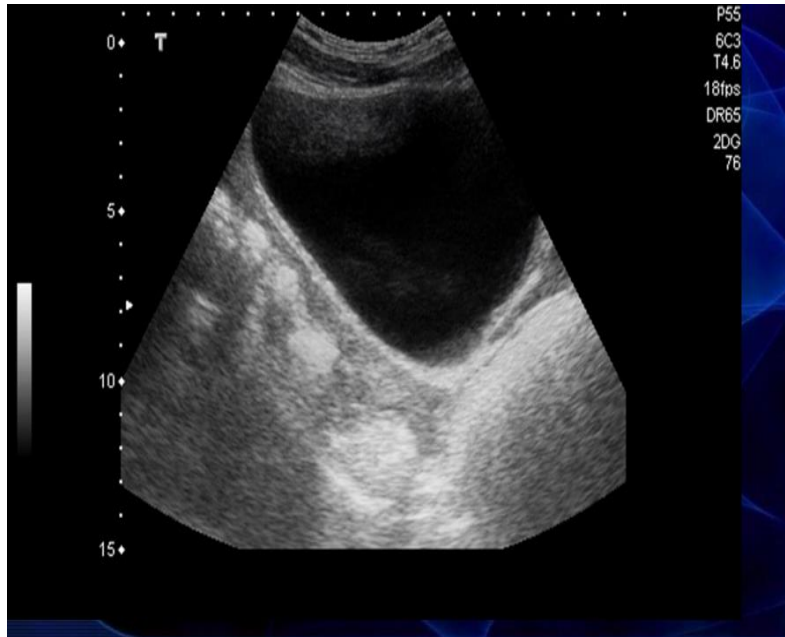
Perikardiyosentez - USG



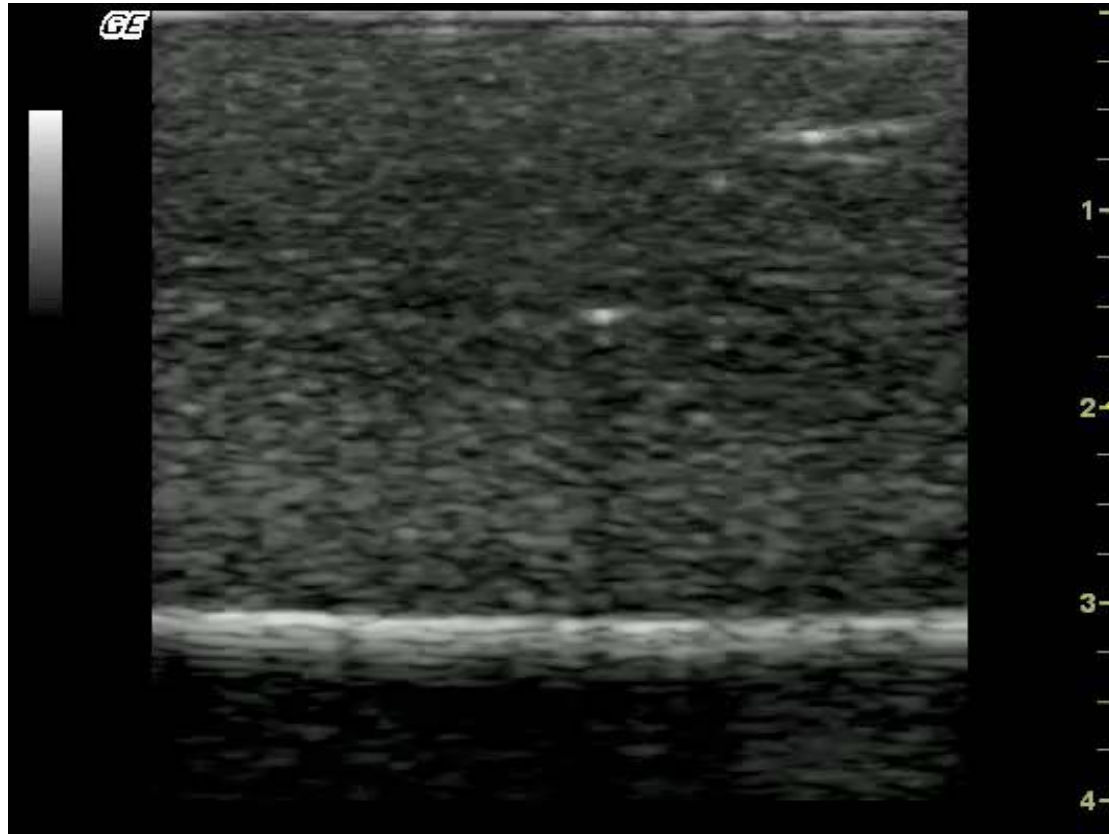
Torasentez -USG



Subrapubic aspirasyon- USG



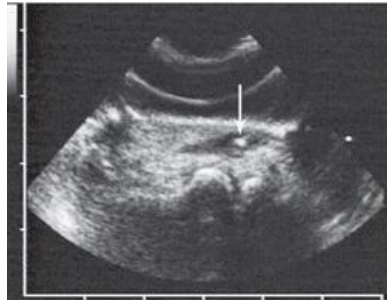
Yabancı cisim lokalizasyonu



Yabancı cisim lokalizasyonu



B

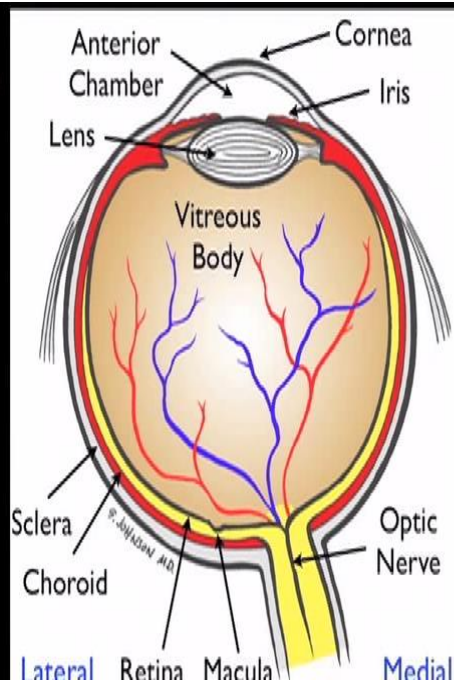


D

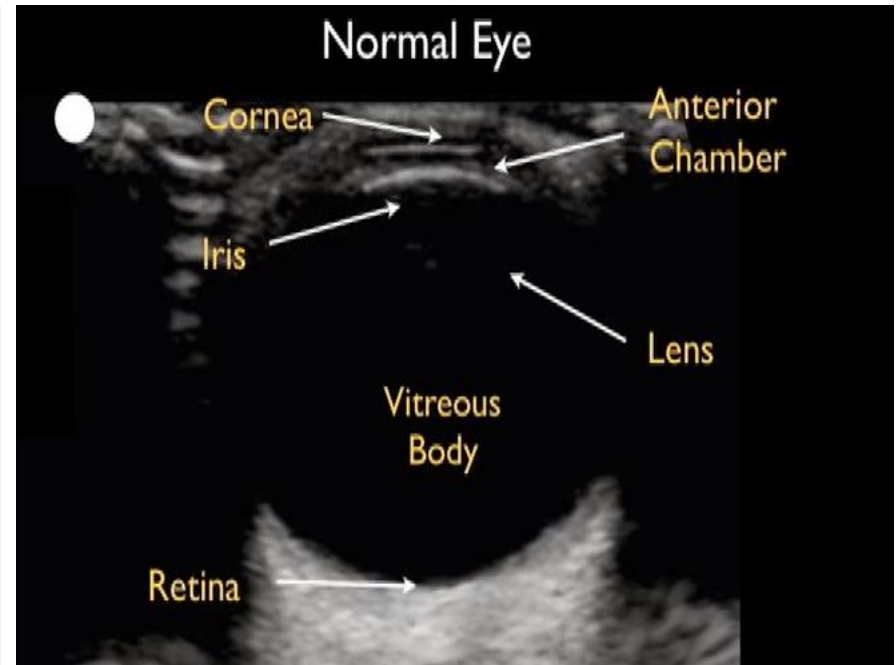


Ocular USG

Anatomy of the Eye:



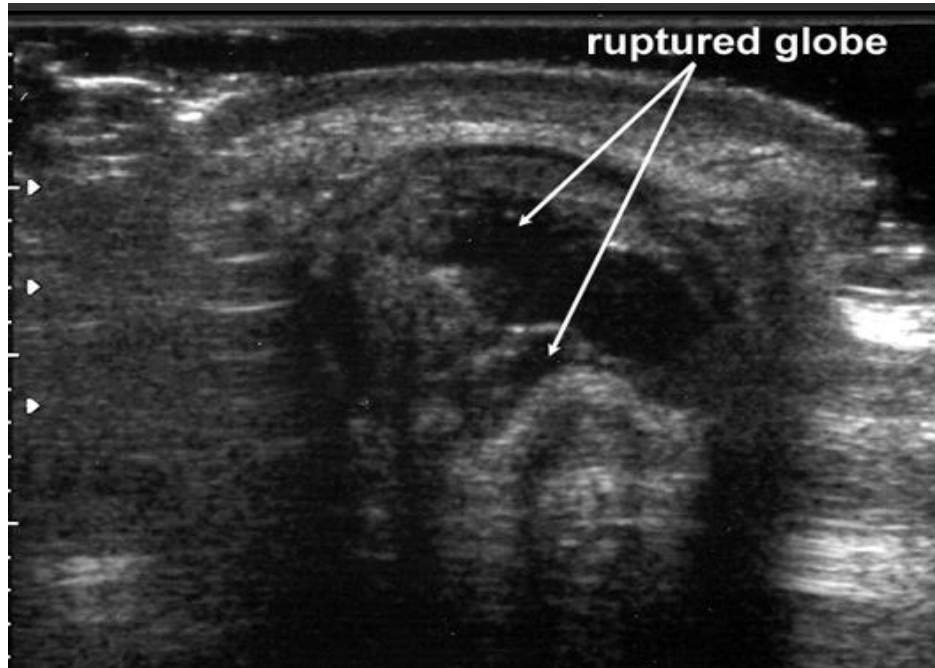
Normal Eye



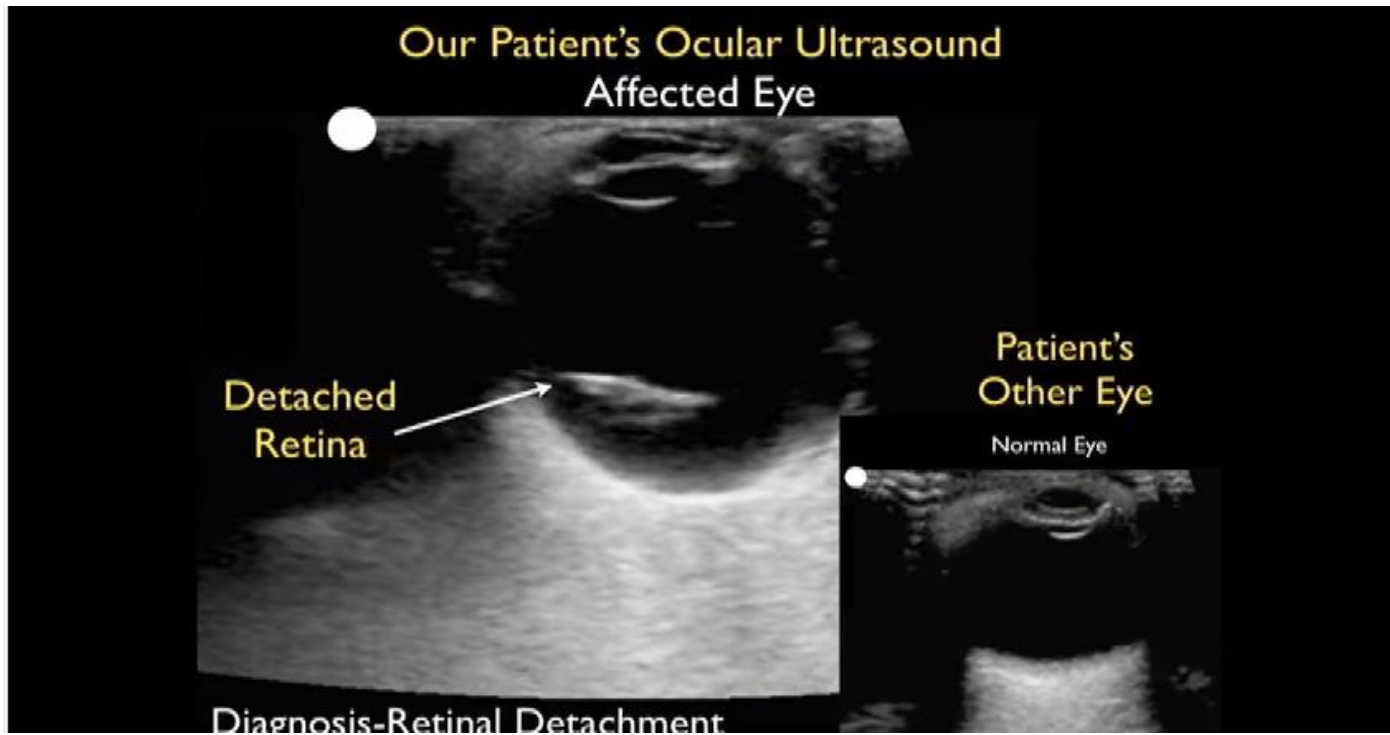
Ocular USG

- ▶ Retinal dekolman
- ▶ Vitreous kanaması
- ▶ Ocular yabancı cisim
- ▶ Globe penetration
- ▶ Lens luxation
- ▶ Retrobulbar hematoma
- ▶ Optik nerve çapının ölçümü

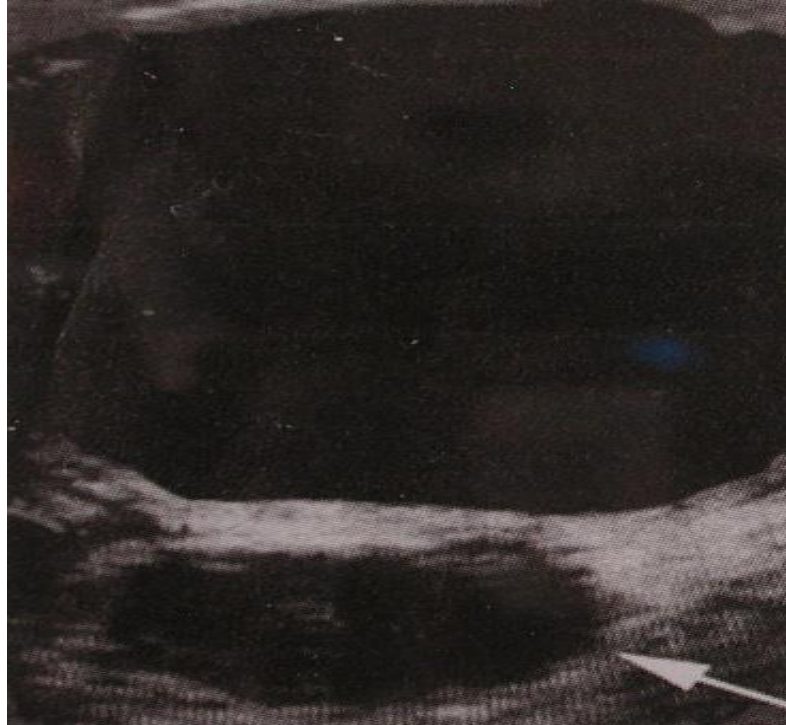
Globe rüptürü



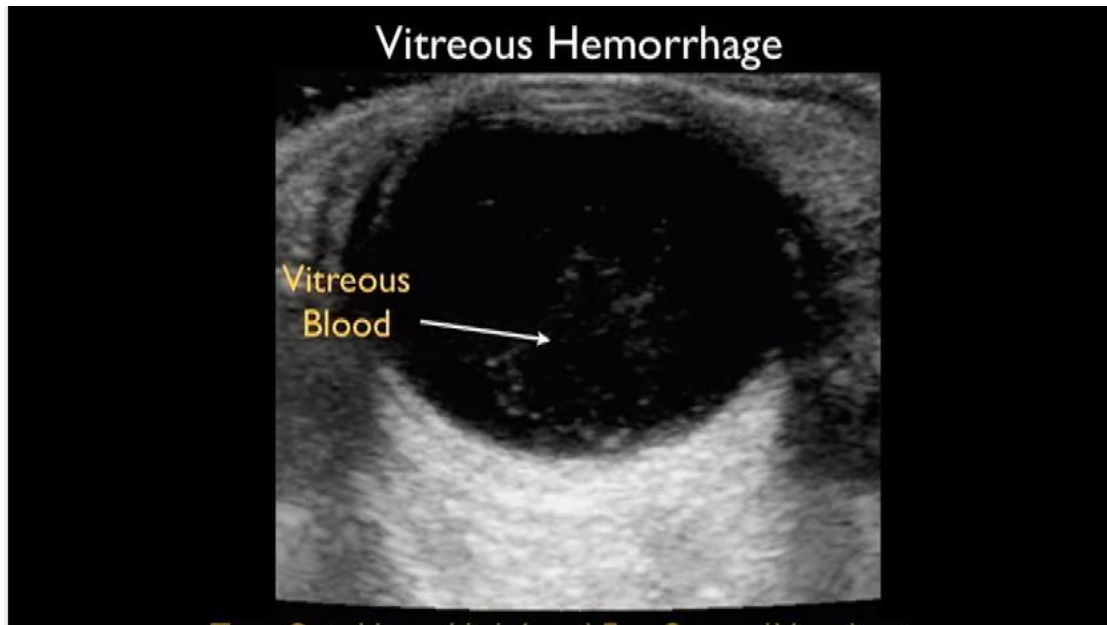
Retinal decolman



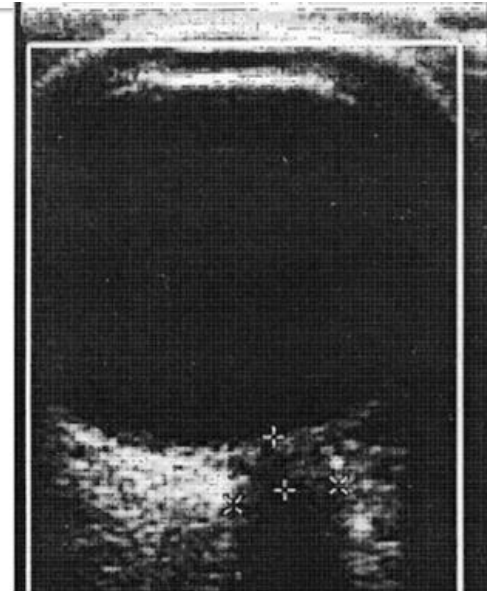
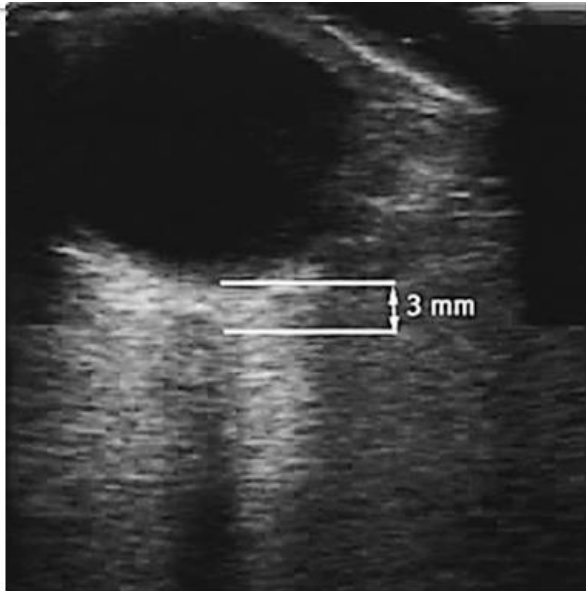
Retrobulber hematoma



Vitros hemoraji



Intrakranial basınç artışı



The role of optic nerve ultrasonography in the diagnosis of elevated intracranial pressure

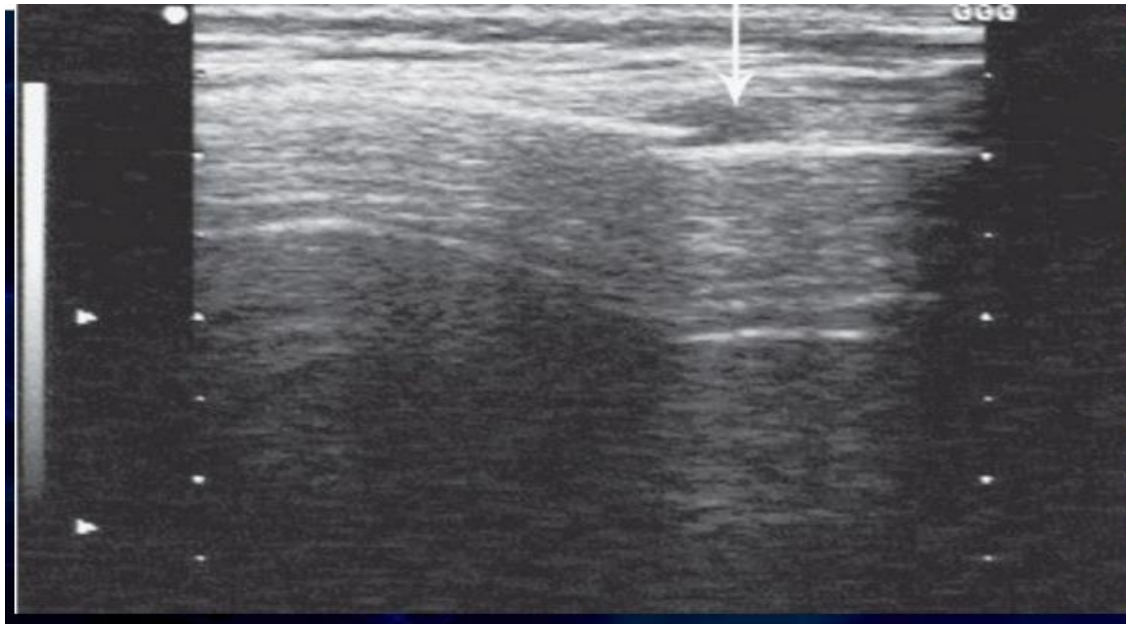
Abdullah Sadik Girisgin, Erdal Kalkan, Sedat Kocak, Basar Cander, Mehmet Gul, Mustafa Semiz

Emerg Med J 2007;24:251-254. doi: 10.1136/emj.2006.040931

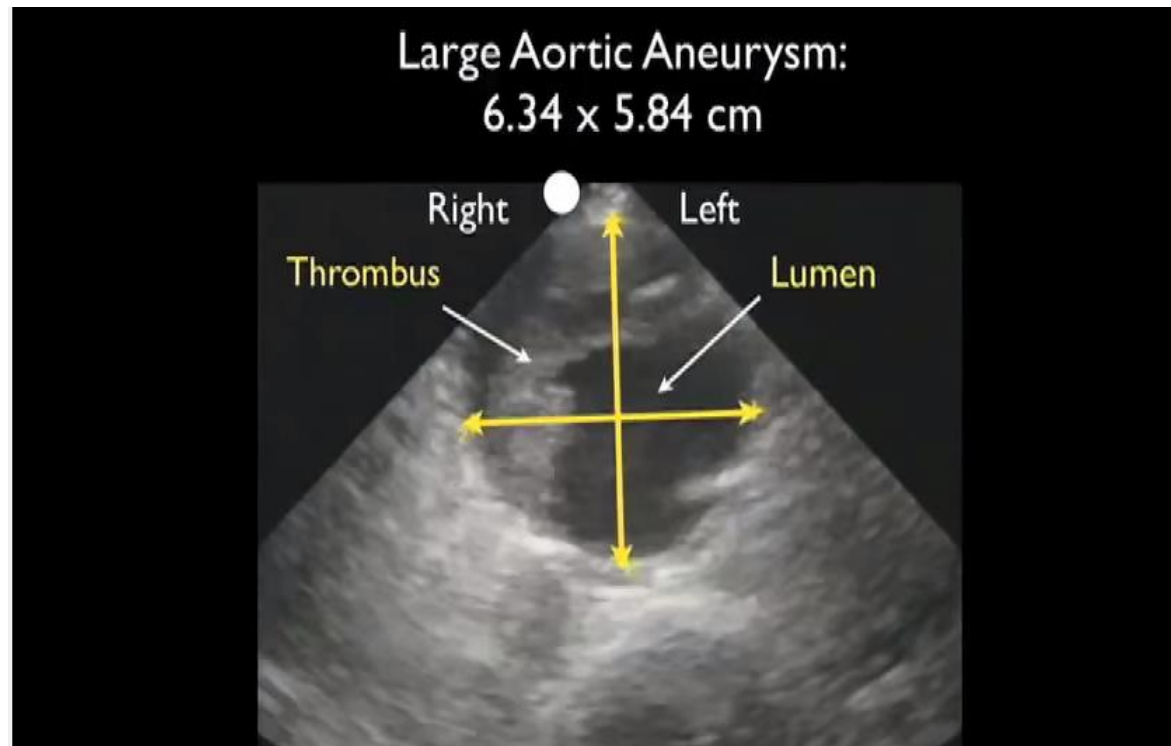
Objective: To evaluate the convenience and utility of optic nerve ultrasonography (ONUS) in the evaluation of emergency patients with elevated intracranial pressure (EICP) due to traumatic or non-traumatic causes.

Methods: This study was conducted between May 2005 and December 2005 in the emergency department of

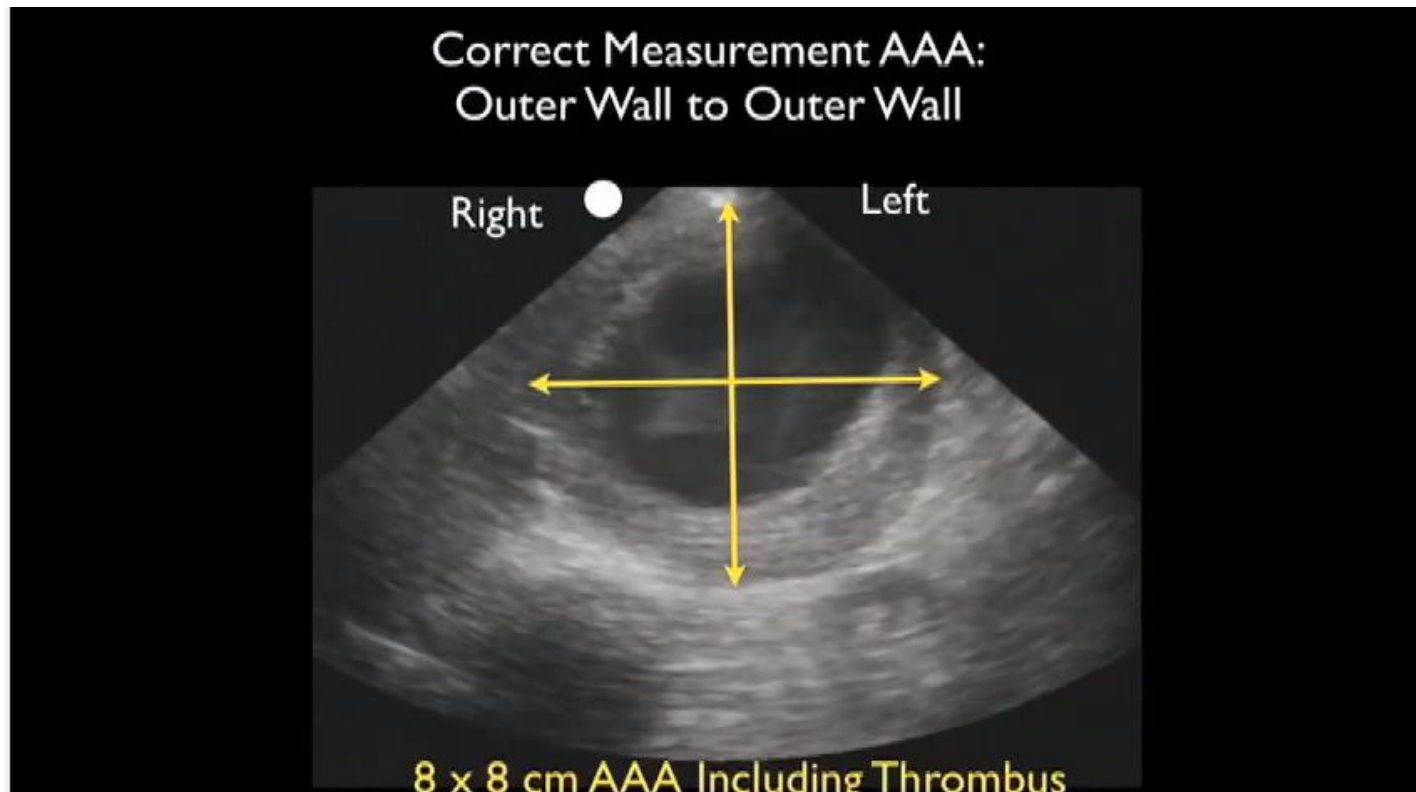
Sternum fraktürü



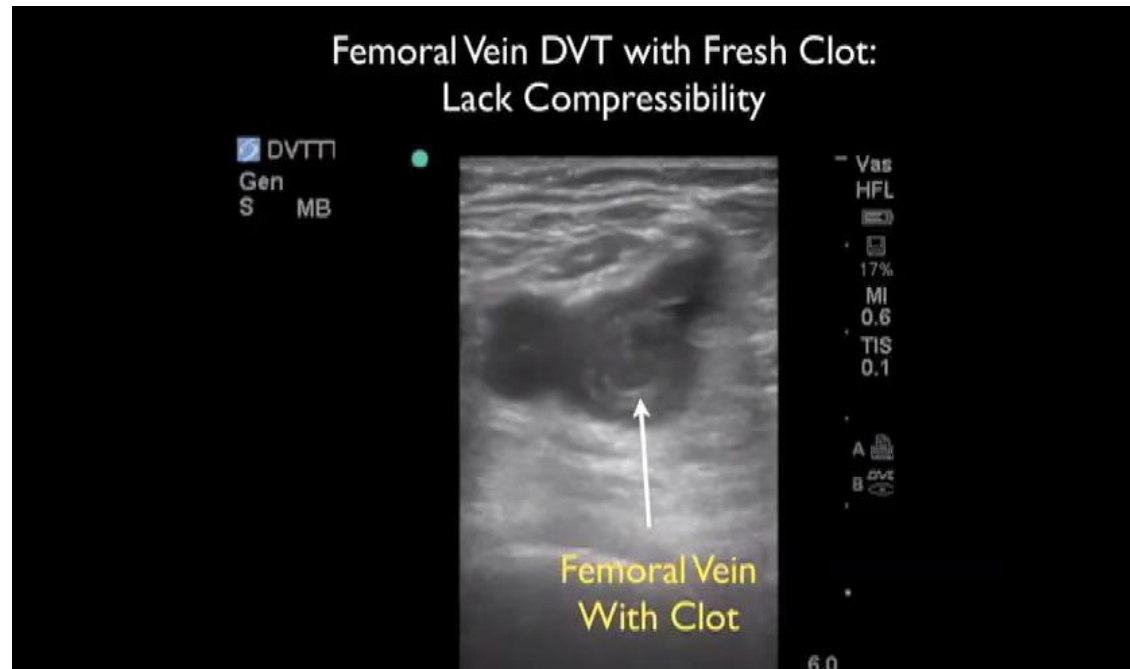
Abdominal Aort Anevrizması - USG



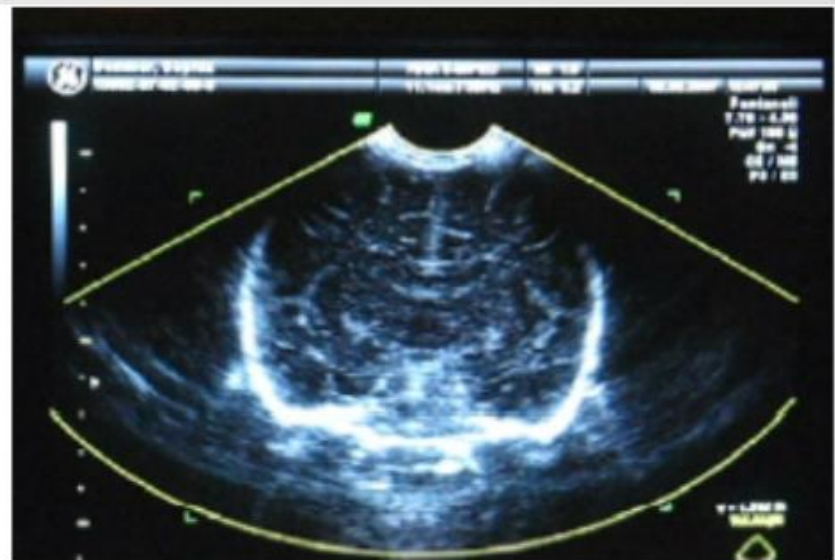
Abdominal Aort Anevrizması - USG



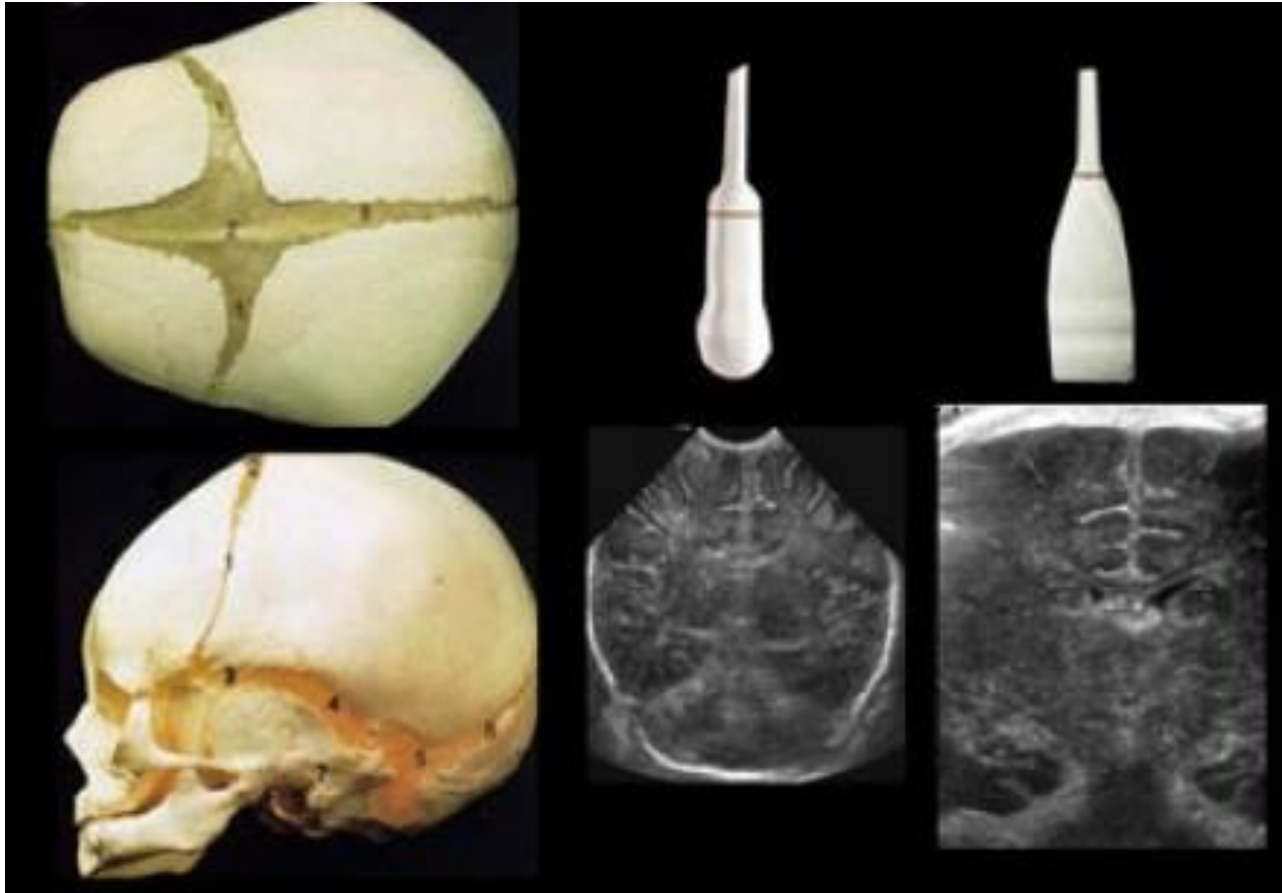
Derin Ven Trombozu - USG



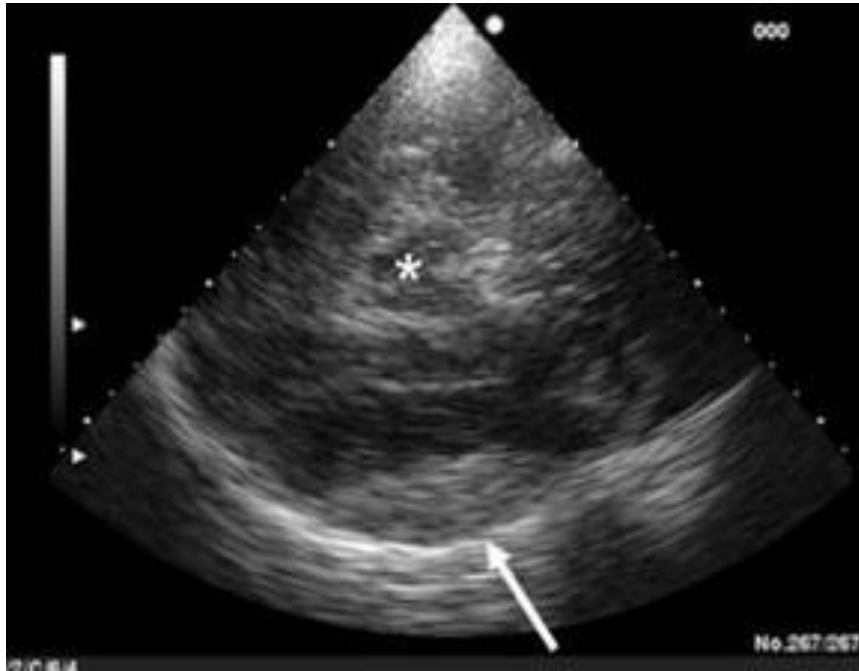
Kranial USG



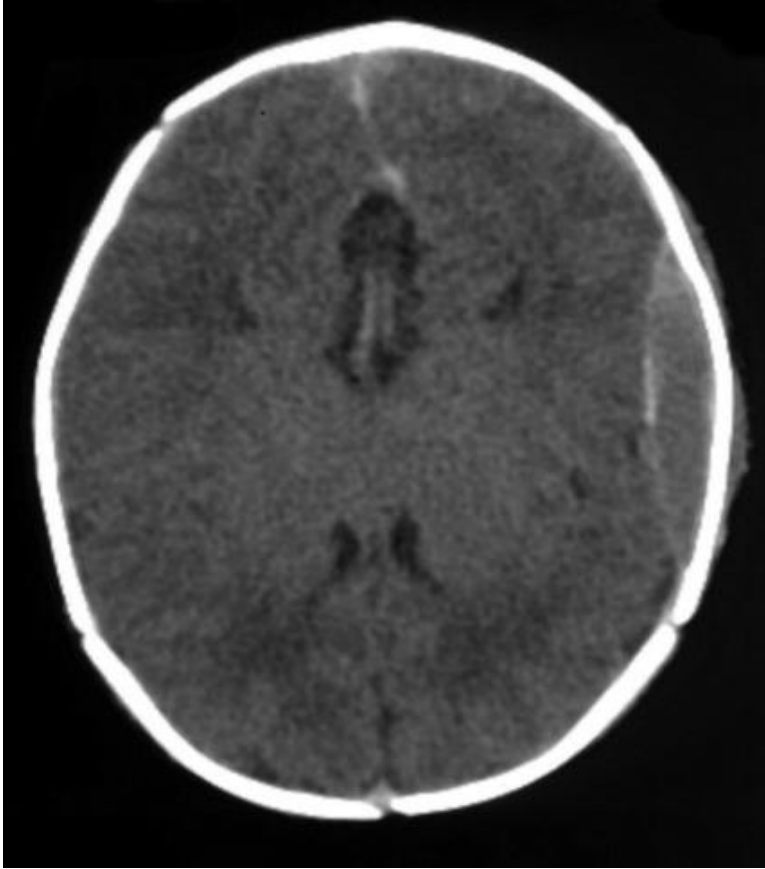
Kranial USG



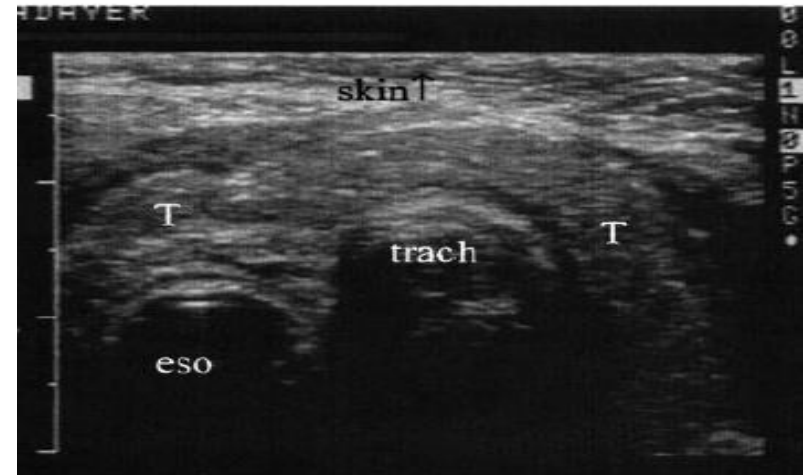
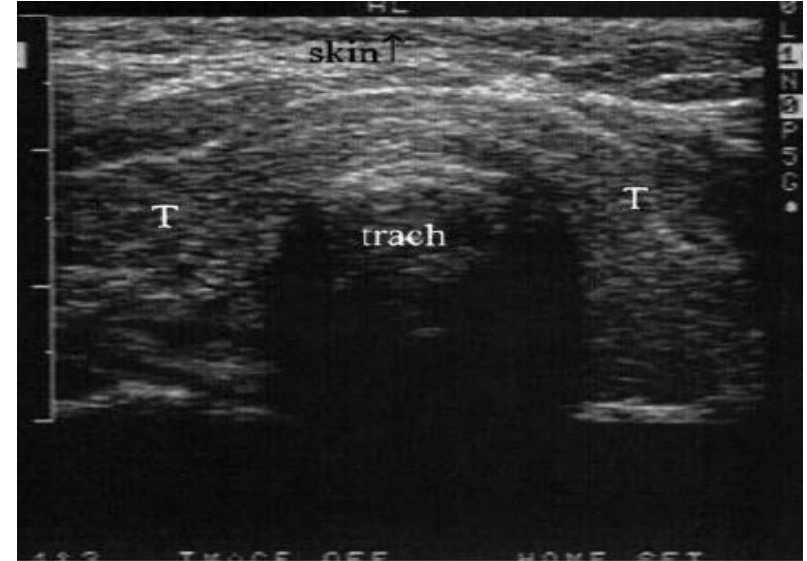
Kranial USG (epidural hematom)



Kranial USG (epidural hematom)



Entübasyon (trakeanın değerlendirilmesi)



Entübasyon (akciğerlerin değerlendirilmesi)

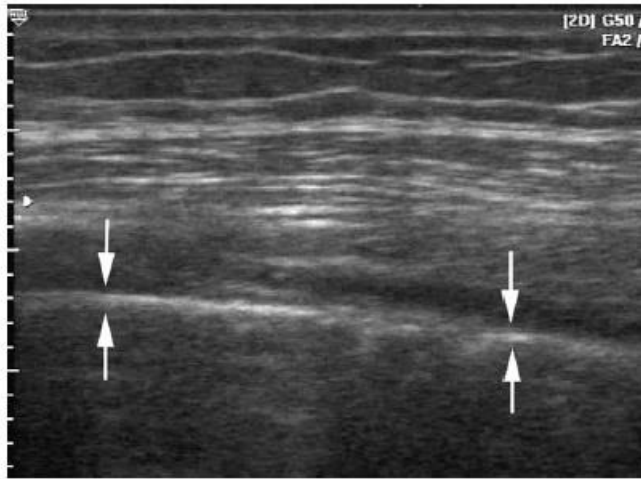
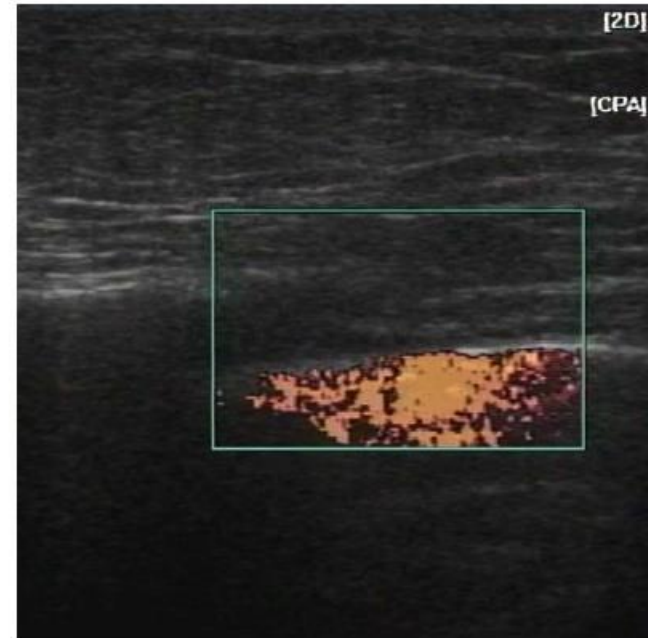
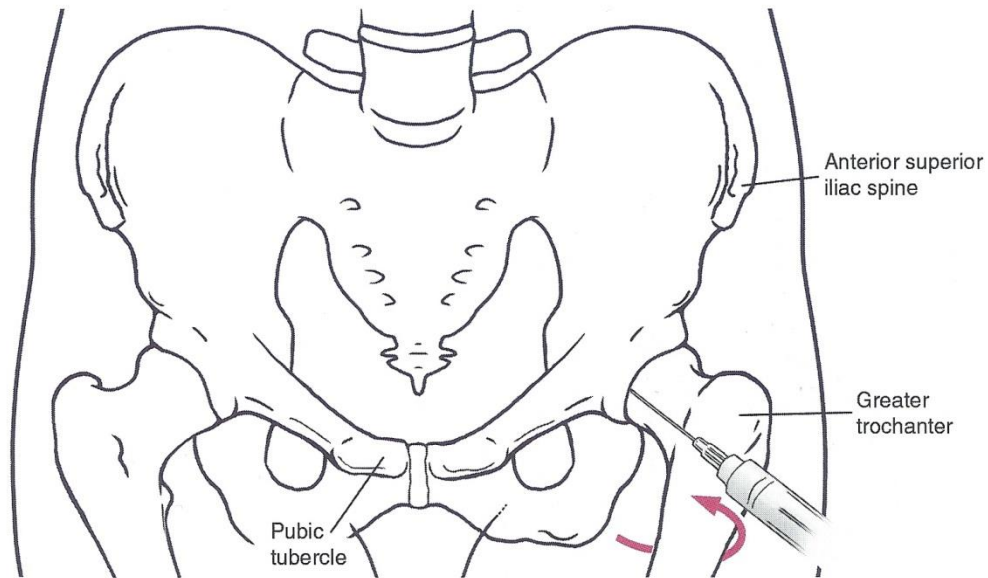


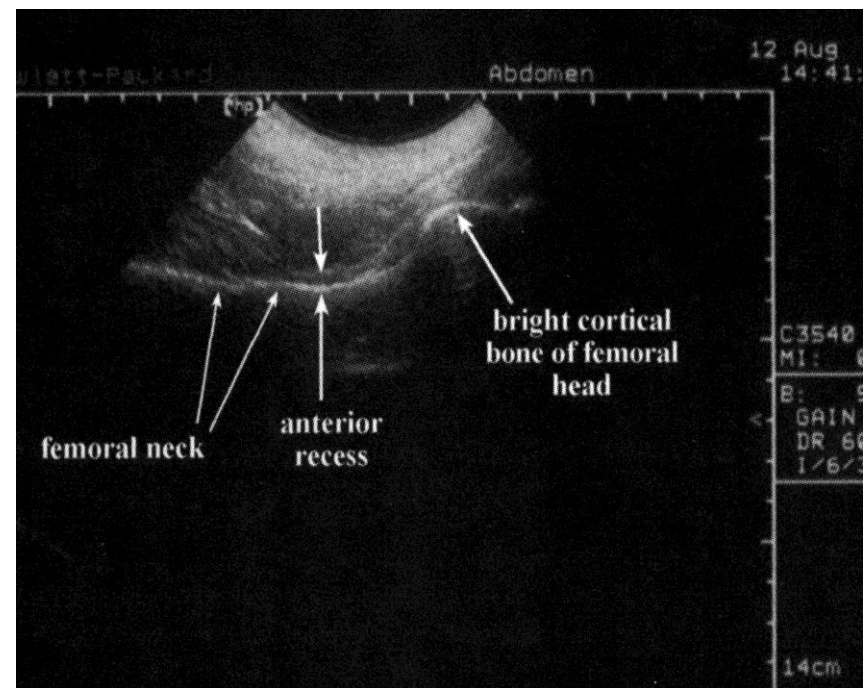
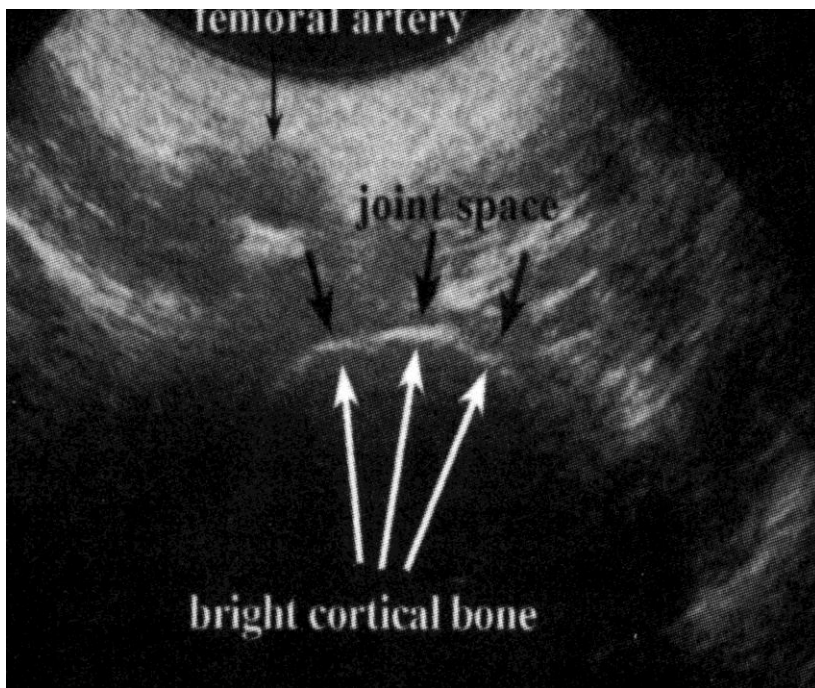
Figure 2. The bright interfaces of the parietal and visceral pleura are seen (arrows).

presence on both sides of the chest was assumed to sig-

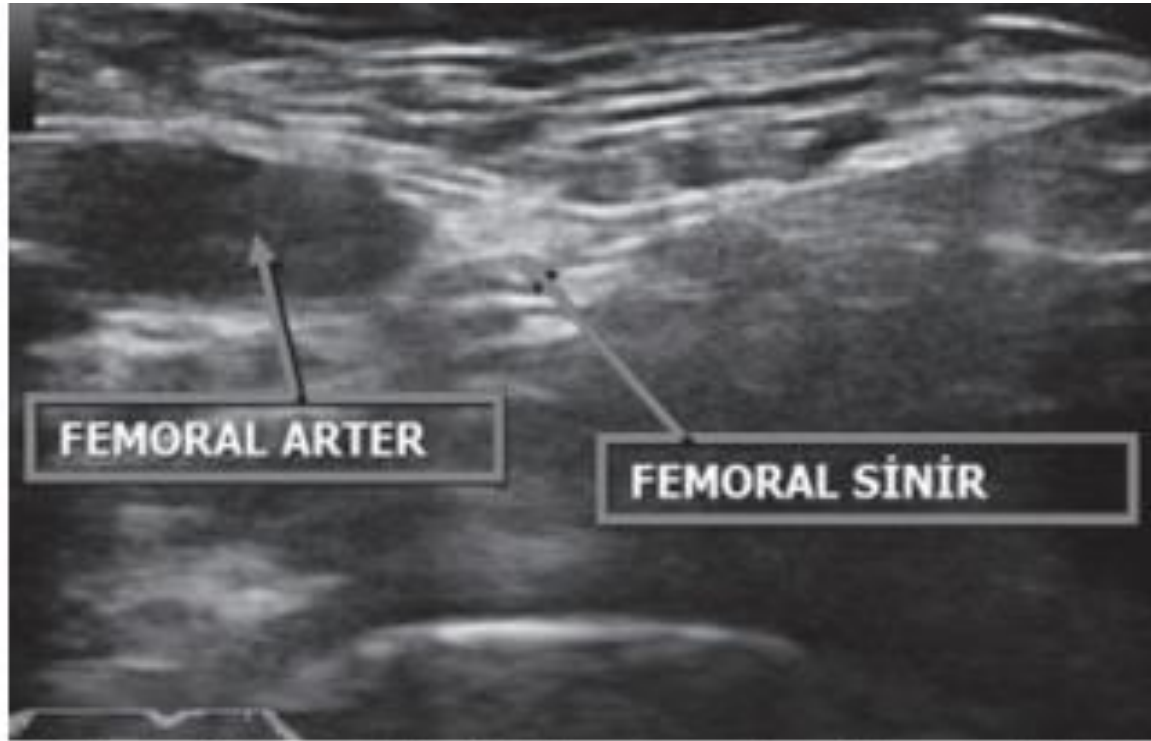


İntra artiküler girişimsel işlemler





Periferik Sinir Bloğu (femoral)



Periferik Sinir Bloğu (siyatik)





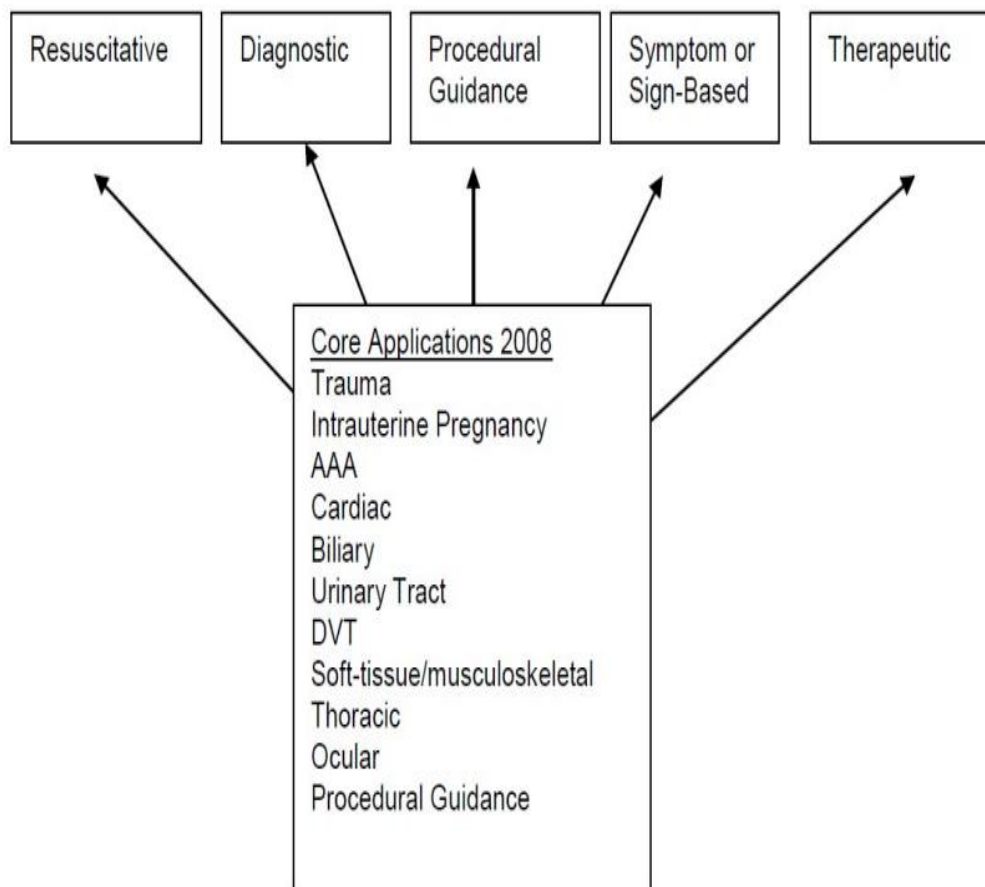
American College of
Emergency Physicians®

ADVANCING EMERGENCY CARE

POLICY STATEMENT

Approved October 2008

Emergency Ultrasound Guidelines



Sonuç

- ▶ Vaktin altın değerinde olduğu acil servislerde, tanıda ve tedavide yaygın kullanım alanı olan USG, acil servislerin içine girmiş ve ayrılmaz bir parçası olmuştur.

Sonuç

USG kullanımı,

- ▶ Hasta taburcu süresinde azalma
- ▶ İnvaziv ve noninvaziv pek çok yöntemin yerine
- ▶ Önemli hastalıkların gözden kaçmasını engelleme

Sonuç

- Bu nedenle; günümüz tıbbında acil tıp eğitimi veren hastanelerde başta olmak üzere , tüm acil servislerde USG bulunmalı ve tüm hekimler eğitilmelidir.

Sabrınız için
teşekkürler...