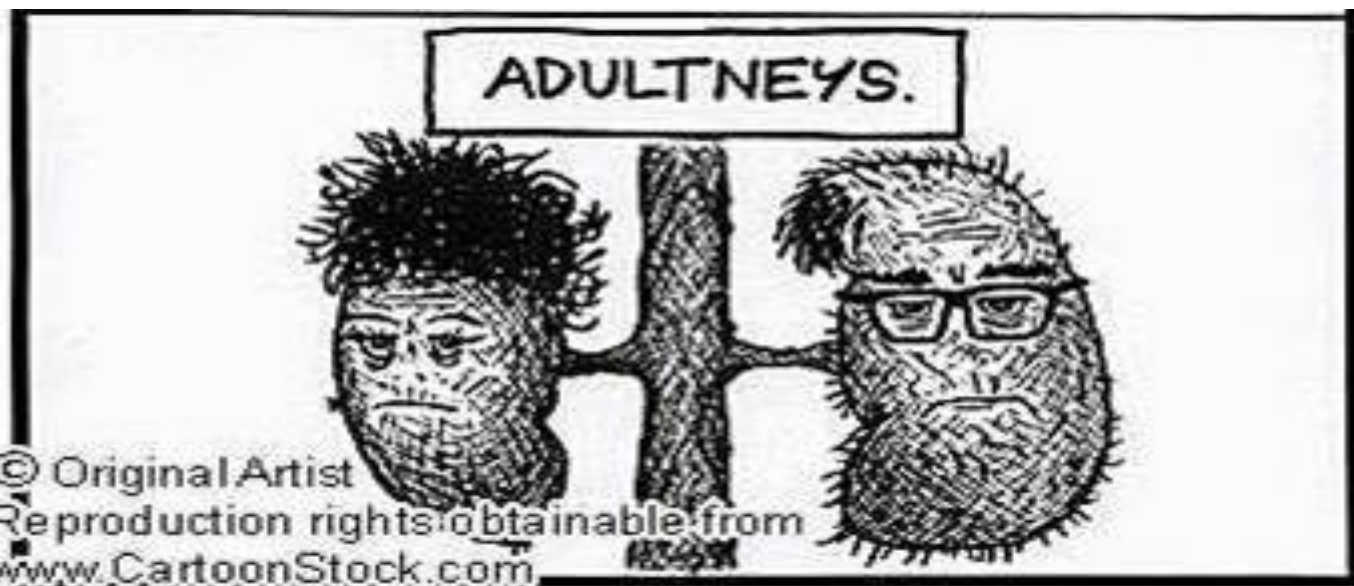
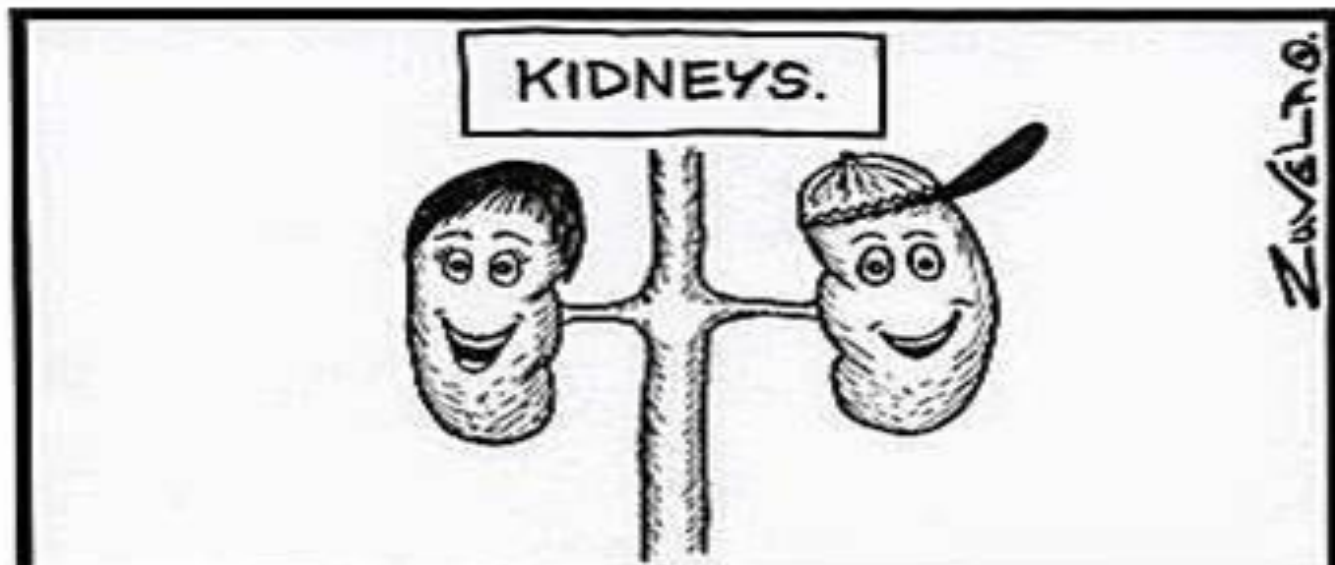


Renal Ultrasonografi

Doç. Dr. Sadık GİRİŞGİN

Selçuk Üniversitesi Meram Tıp Fakültesi

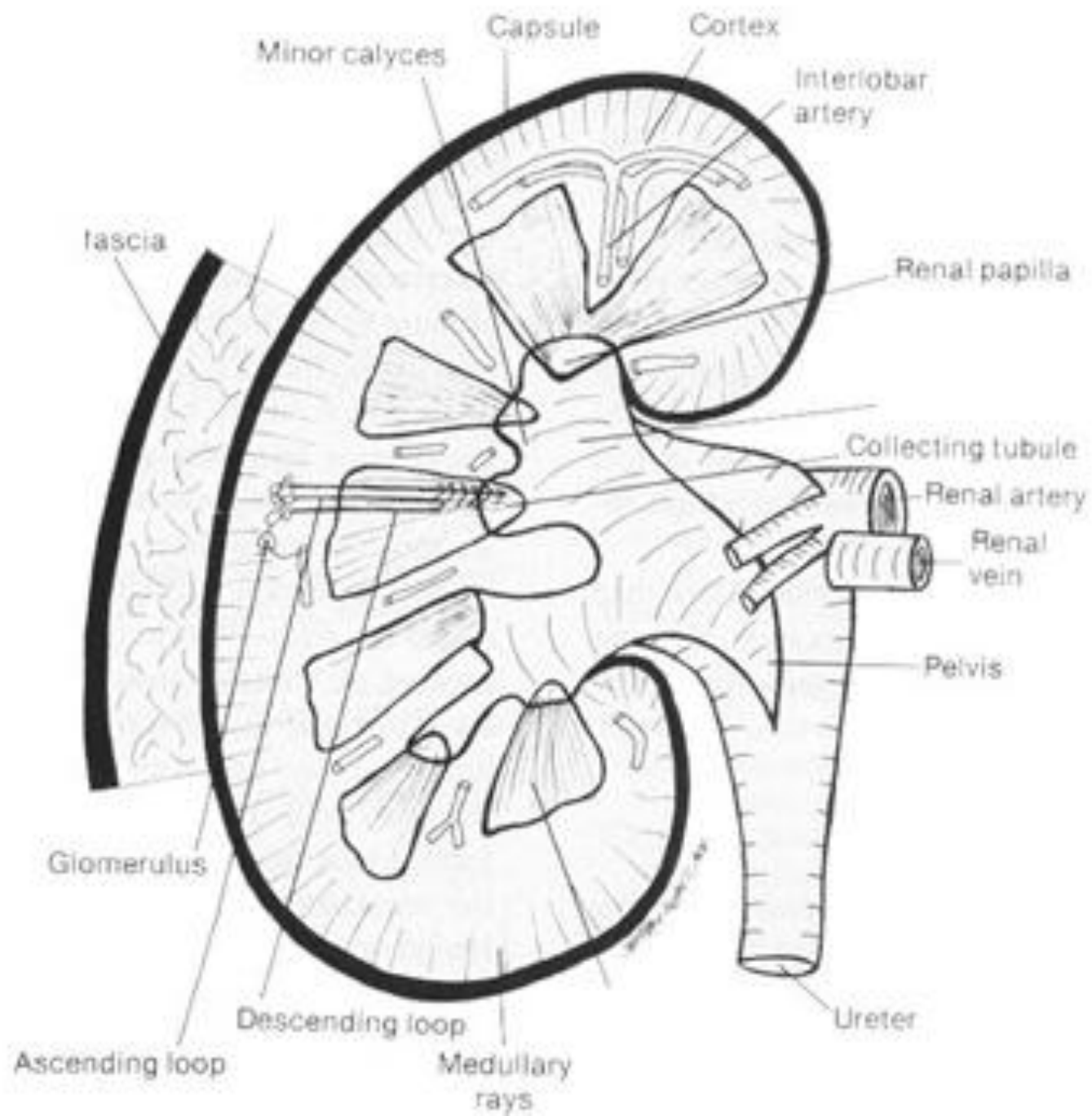
Acil Tıp Anabilim Dalı



Renal USG'yi neden yaparız?

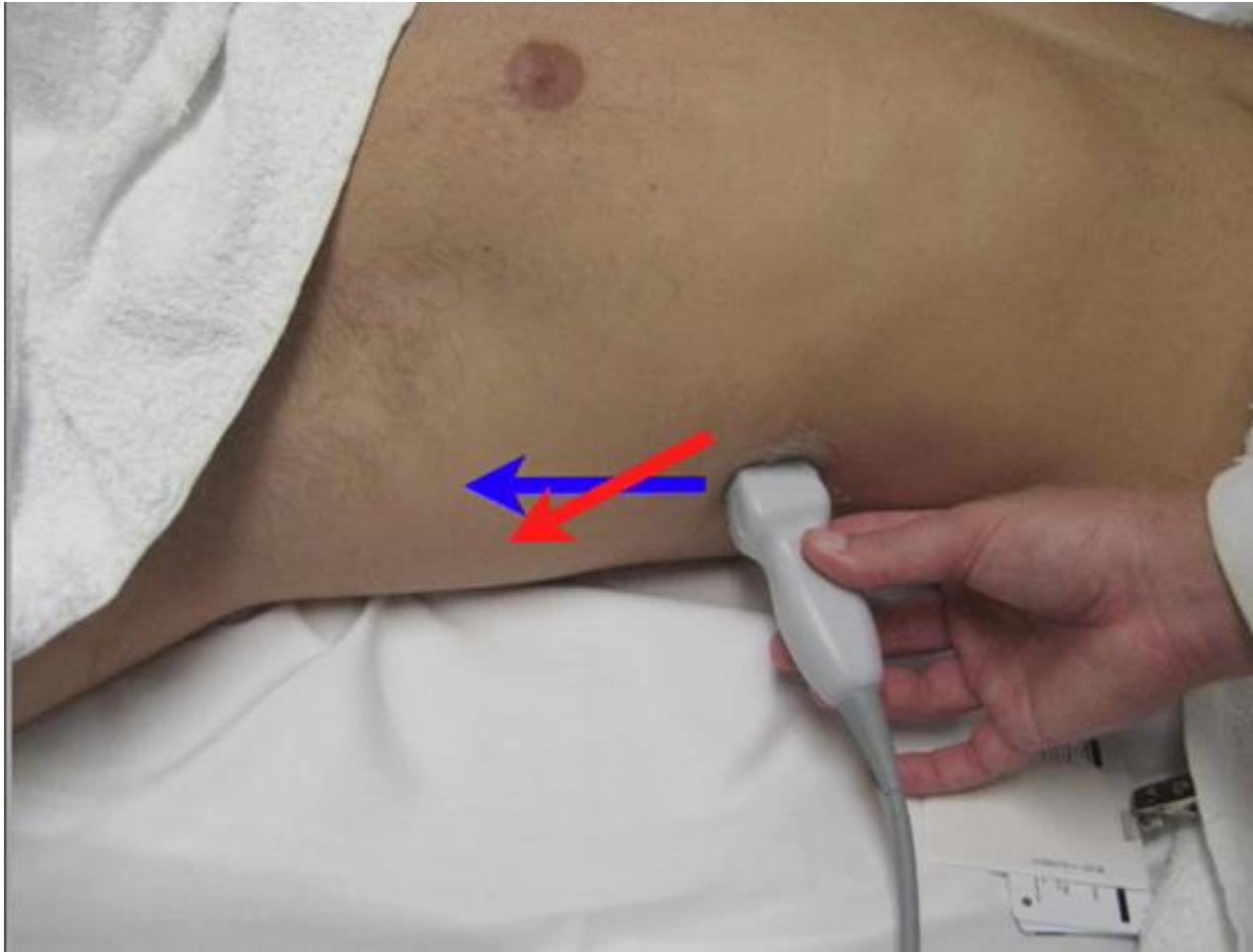
- Akut flank ya da sırt ağrısı
- Hematürü
- Uriner retansiyonda
- RENAL USG'de neyle karşılaşacağımızı bilemeyiz





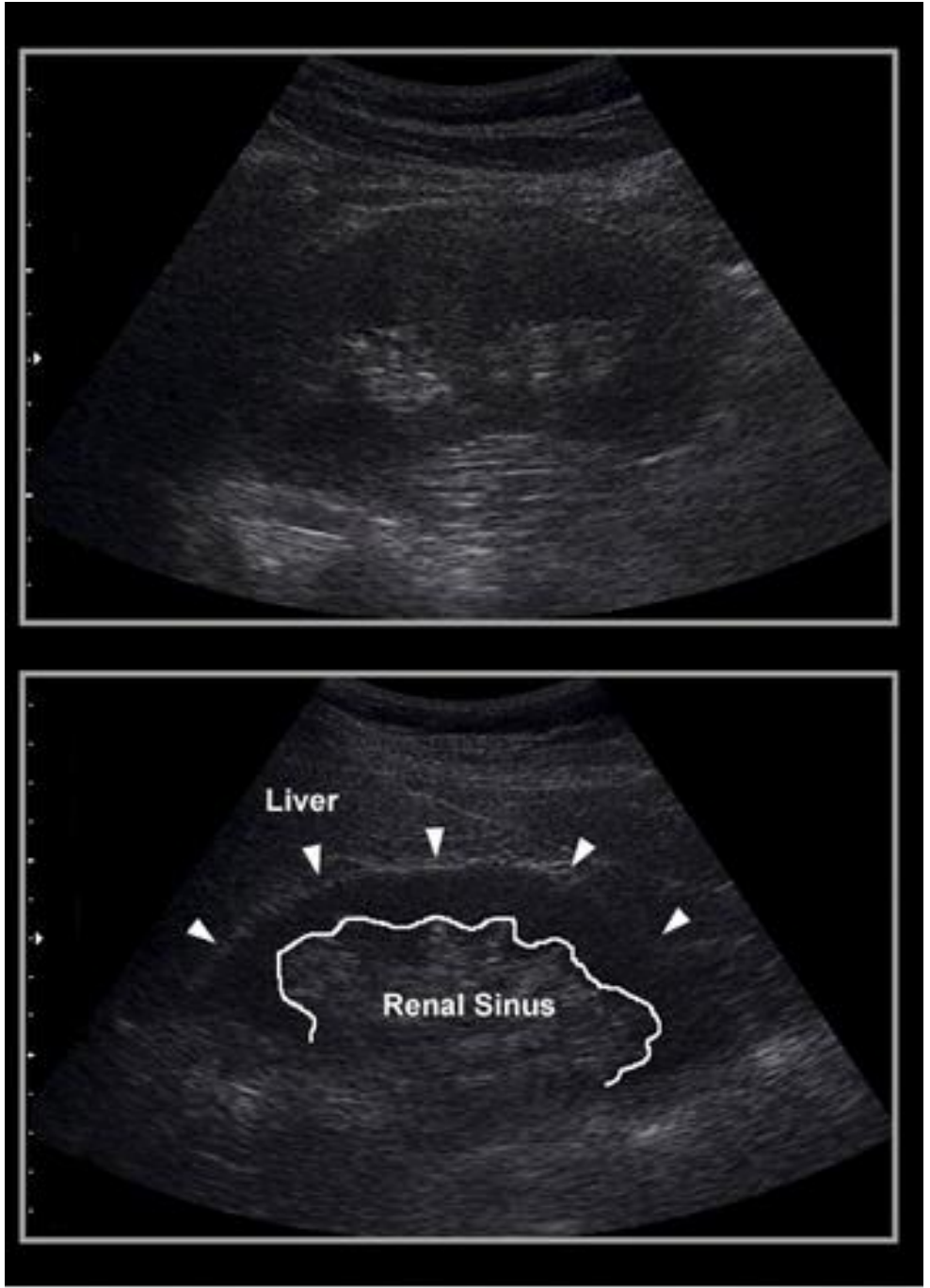
- B6brekler 8-11. Kotlar arasındadır
- 3 - 5 MHz prob kullanırız
- Supine ya da lateral dek6bit pozisyonda deęerlendiririz

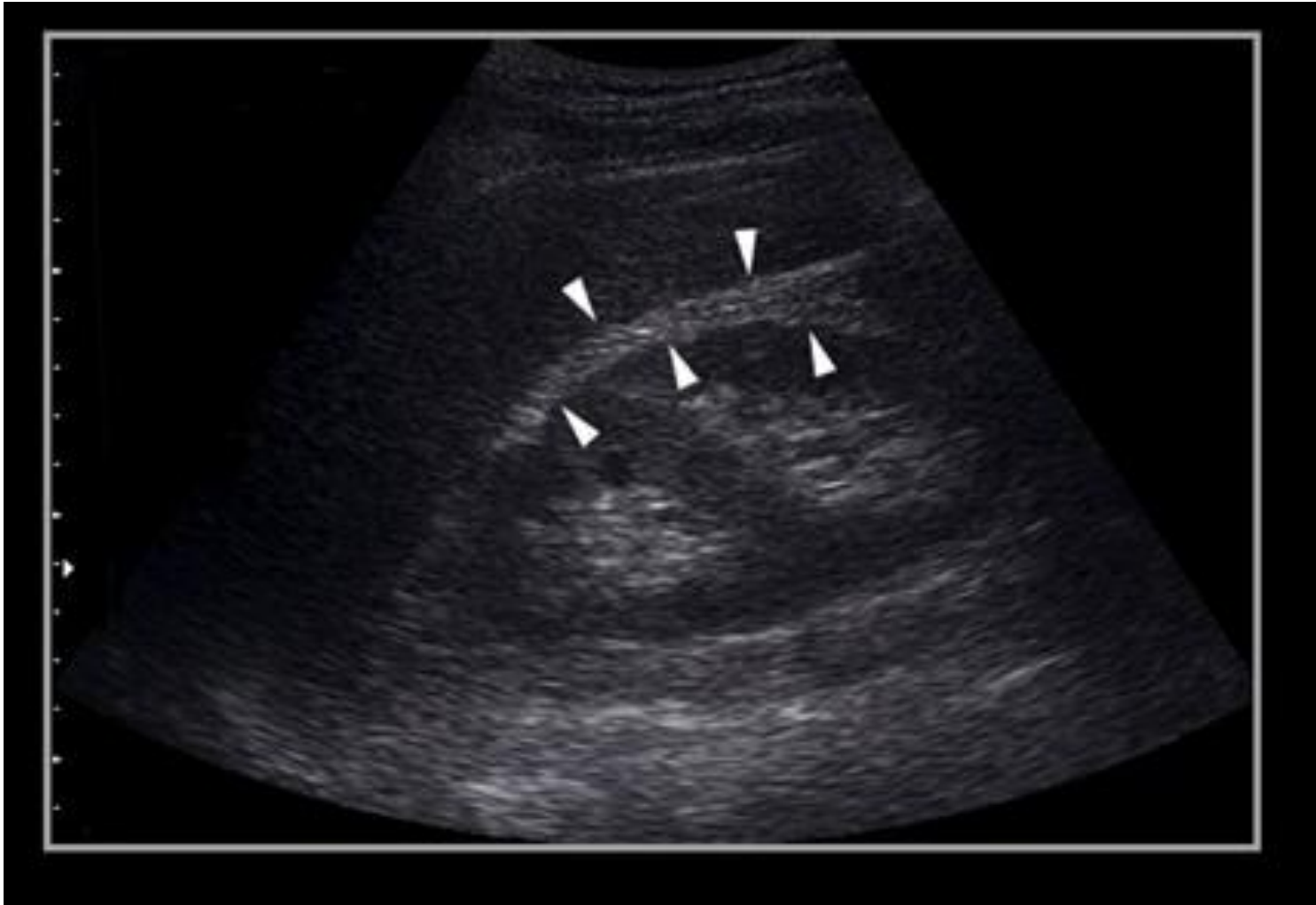




Değerlendirme

- Korteks,
- medulla ve
- sinüsü görmeliyiz





USG ile renal deęerlendirilmede incelenmesi gerekenler

- Her iki bbrek ve mesane deęerlendirilmeli
- Her bir bbreęin longitudnal deęerlendirilmesi yapılmalı
- Her bir bbrek transvers deęerlendirilmesinde st, orta ve alt kesitler alınmalı
- Mesane transvers ve longitudinal kesit alınmalı

1. Derece Hidronefroz

- Kalisiyal dilatasyon vardır ve hiperekoiktir
- Anatomik yapılar korunmuştur
- Aşırı hidrate edilen ve aşırı distansiyonu olan hastalarda normaldir





2. Derece Hidronefroz

- Kalisiyal sistem distandü
- Ayı pençesi görünümü vardır

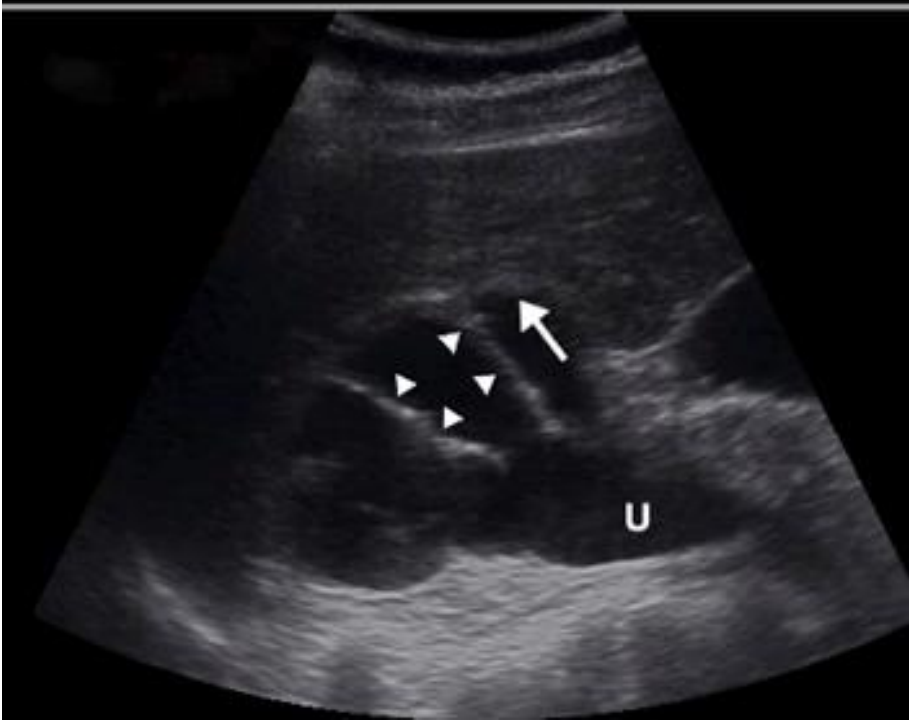




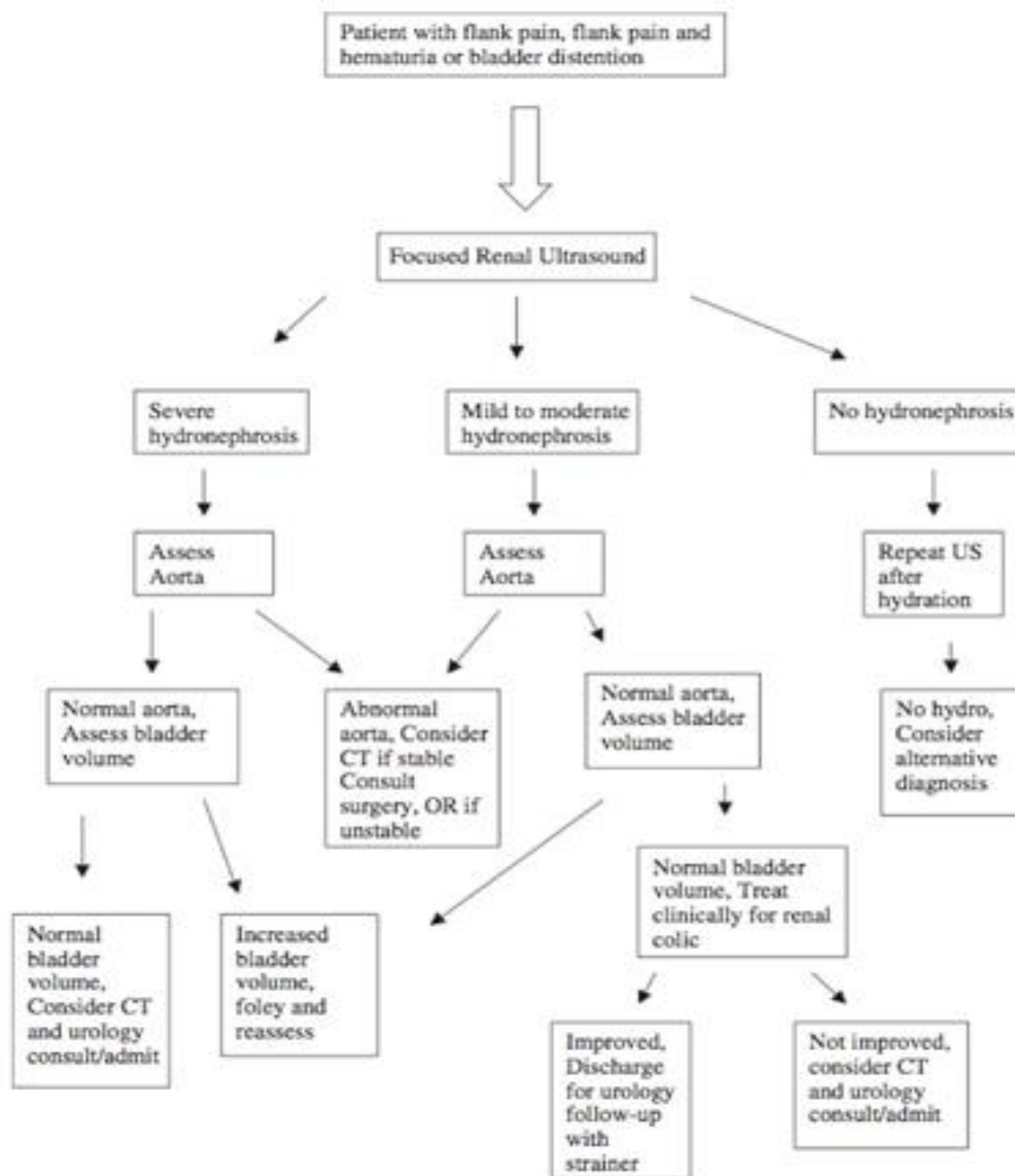


3. Derece Hidronefroz

- Renal medulla ve korteks silinmiştir
- Balona benzer (ancak ince değildir)





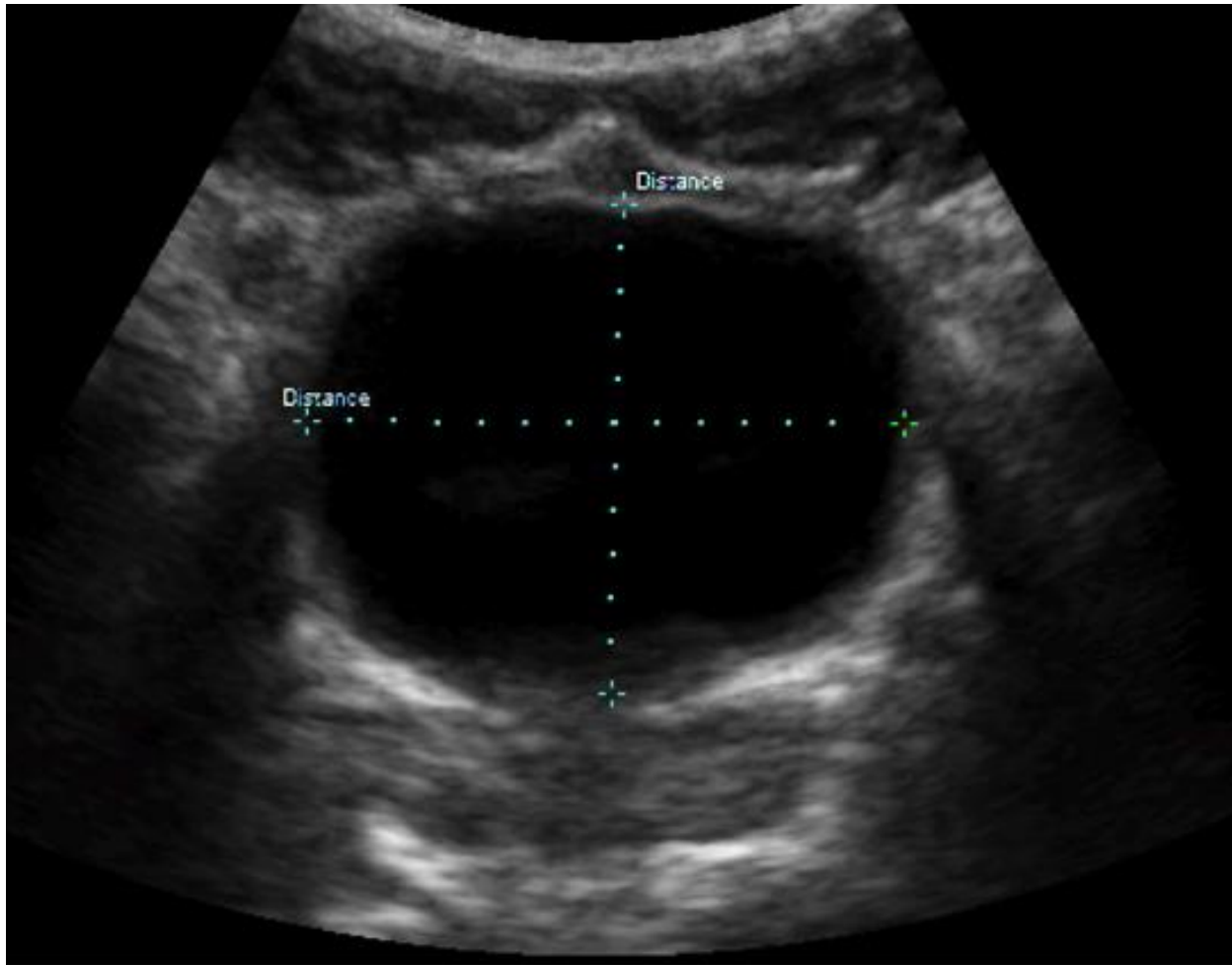


Mesane USG'sinde



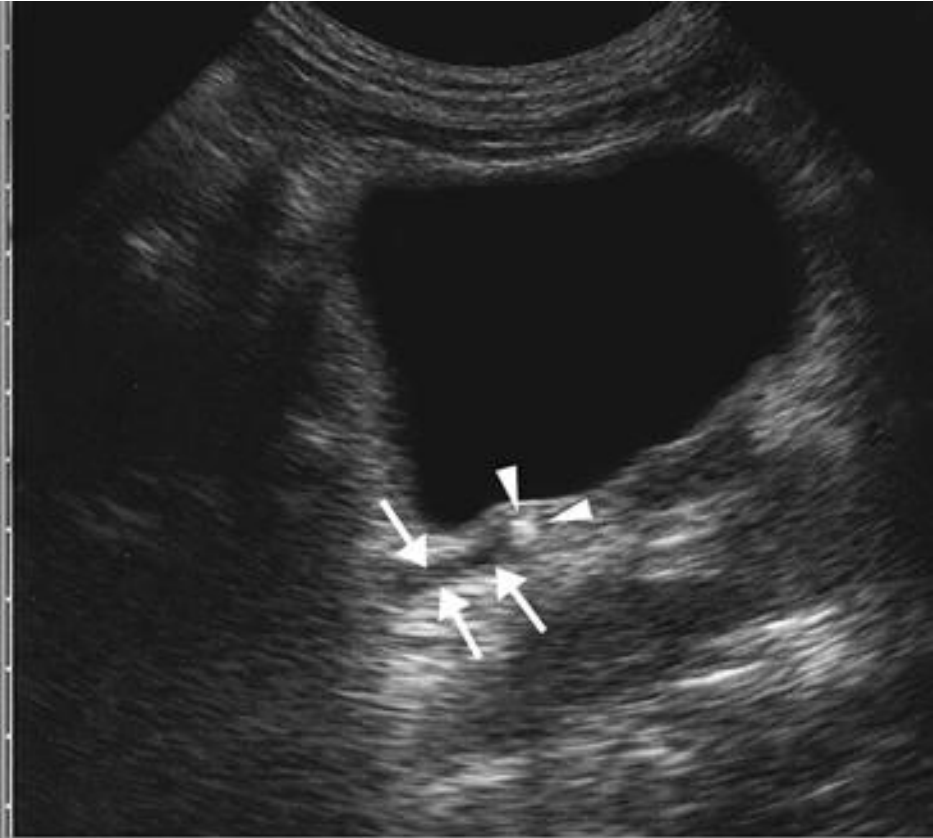
- Transvers-longitudünel kesit alınır
- Sympisis pubisin hemen üzerinde görüntüleme yapılır
- Prostatı değerlendirmek için kaudale (aşağıya) açılmalıdır

Mesane

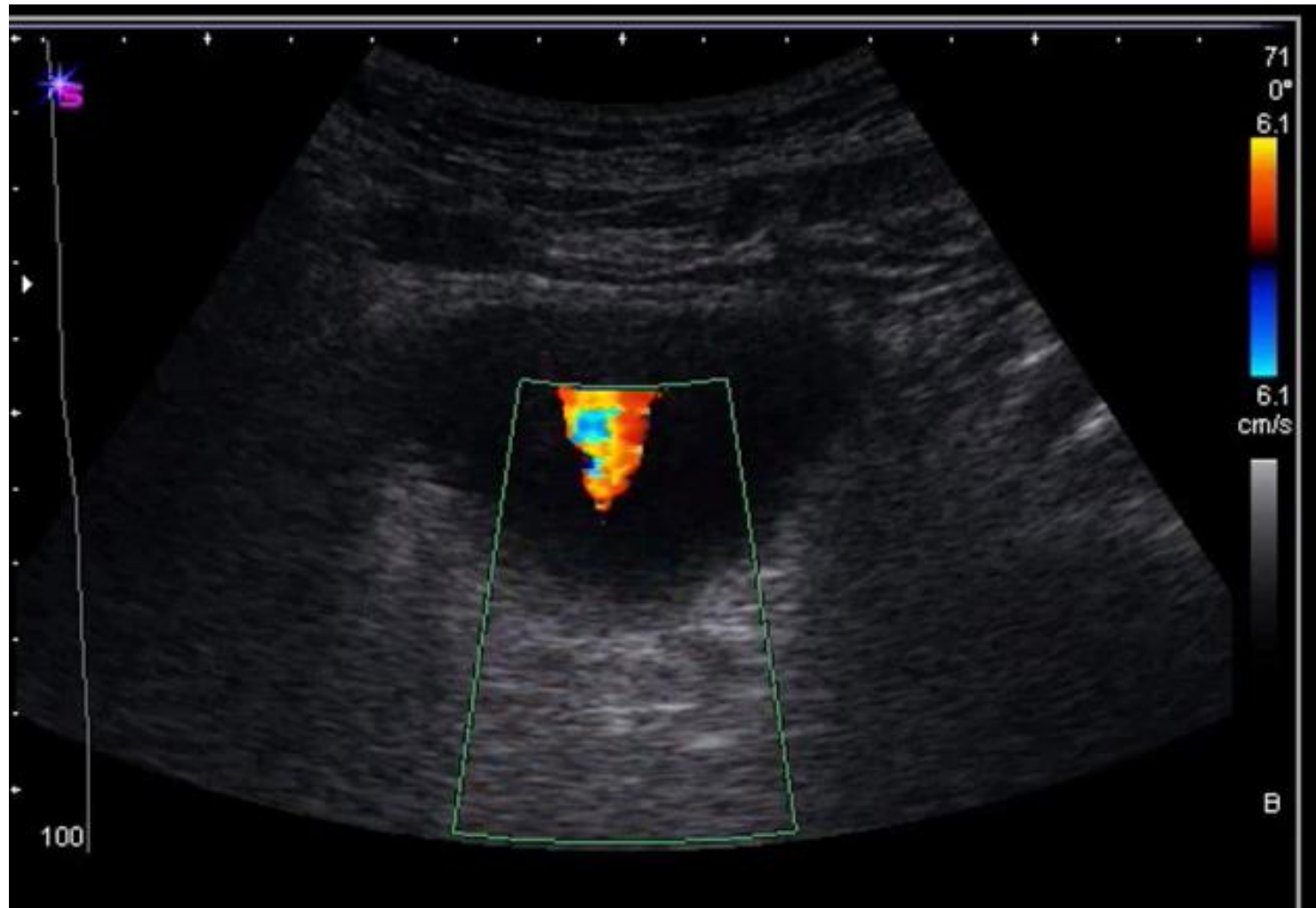


Transverse Bladder
(Right to Left, Anterior to Posterior)

Üreteral Taş



Üreteral Jet



Emergency Ultrasound and Urinalysis in the Evaluation of Flank Pain

Romolo J. Gaspari, MD, MSc, RDMS, Kurt Horst, MD

Abstract

Objectives: To determine the sensitivity and specificity of limited emergency ultrasonography of the kidney in diagnosing renal colic. **Methods:** This was a prospective observational trial from December 2001 to December 2003 at a suburban emergency department. Patients who presented with flank pain suspicious for renal colic were enrolled. Exclusion criteria included fever, trauma, known current kidney stone, unstable vital signs, and inability to provide consent. All patients underwent sequential emergency ultrasonography and computed tomography of the kidneys and bladder. Data were analyzed using chi-square analysis. The primary outcome was the sensitivity and specificity of ultrasonography. Results were also stratified for presence of hematuria. **Results:** Fifty-eight of the 104 patients enrolled in the study were diagnosed with renal colic. The overall sensitivity and specificity of bedside ultrasonography for the detection of hydronephrosis were 86.8 (95% confidence

interval [CI] = 78.8 to 92.3) and 82.4 (95% CI = 74.1 to 88.1), respectively. In patients with hematuria, hydronephrosis by emergency ultrasonography demonstrated a sensitivity and specificity of 87.8 (95% CI = 80.3 to 92.5) and 84.8 (95% CI = 73.7 to 91.9), respectively. In 55 of the cases, the initial computed tomograph was read by a resident and later re-read by an attending physician. Using the reading of the attending physician as the criterion standard resulted in a sensitivity and specificity of 83.3 (95% CI = 73.2 to 88.0) and 92.0 (95% CI = 79.9 to 97.6), respectively. **Conclusions:** Emergency ultrasonography of the kidneys shows very good sensitivity and specificity for diagnosing renal colic in patients with flank pain and hematuria. **Key words:** emergency ultrasonography; bedside ultrasonography; limited ultrasonography; renal colic; kidney stones; flank pain. *ACADEMIC EMERGENCY MEDICINE* 2005; 12:1180-1184.

- Prospective observational trial. Small number of patients. Ultrasound vs. CT scan.
- Sens 83% (CI 73-88) and Spec 92% (CI 80-98)

Renal Taş



Mesanede Taş



ABD.

C6-2 3.5

FPS 12s

FOLEY

170

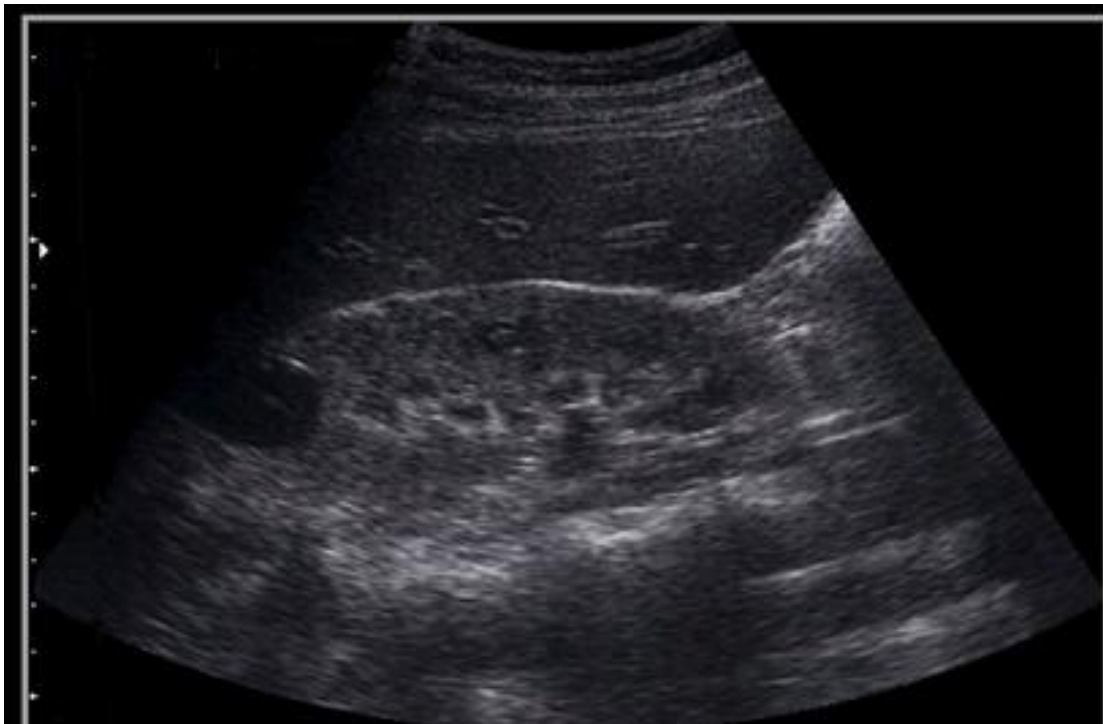
B



Dikkat edilmesi gereken durumlar

- Renal kistler
- Atnalı böbrek
- KBY

Basit Renal Kist



KBY



KBY



Renal USG'nin komponentleri (Özet)

- Her iki böbrek ve mesane görüntülenmeli
- Her böbreğin longitudünel ölçümü yapılmalı
- Transvers olarak her iki böbrek üst-orta-alt bölüm ölçümü yapılmalı
- Mesanenin transvers ve sagital ölçümü yapılmalı

Teşekkürler

