UNUTULAN DİREK ÜRİNER GRAFİ VE IVP'DEN US'YE

Dr. Muşturay Karçaaltıncaba

Kardiyovasküler ve Abdominal Radyoloji Bölümü

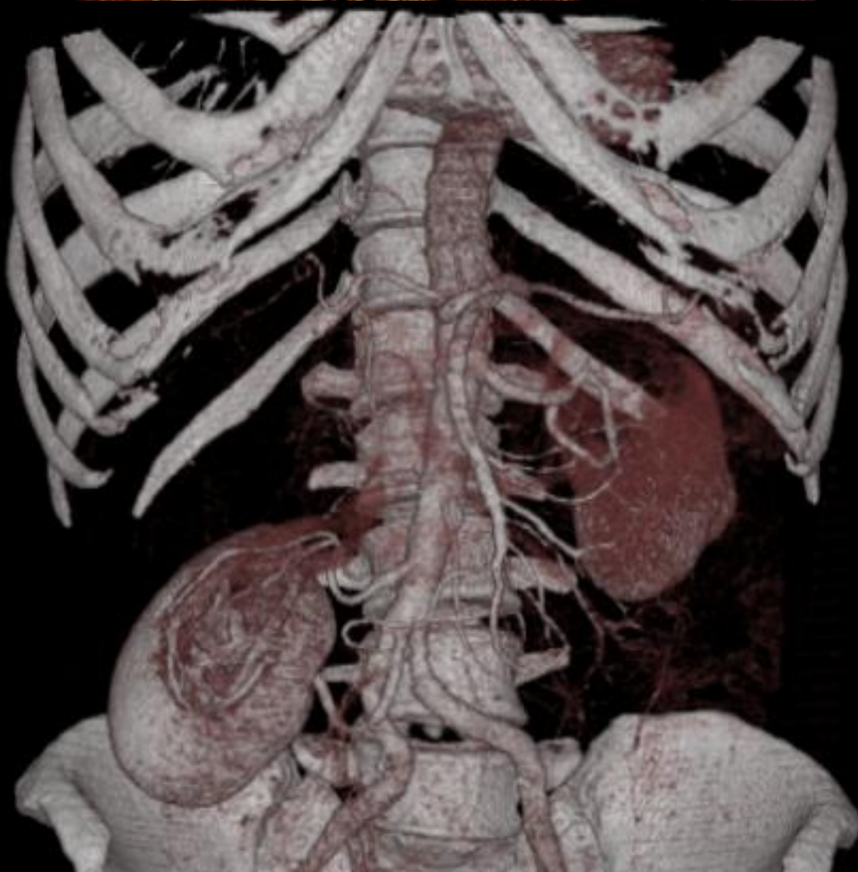
HACETTEPE RADYOLOJİ

SERÜVEN

- DİREK GRAFİ
- IVP
- US
- İLGİNÇ OLGULAR
- GELECEK

DİREK KARIN GRAFİSİ


10:59
R
L
R
L
Zoom:1.3
BP: -160.7


Date of origin: 1995
Last review date: 2011

American College of Radiology
ACR Appropriateness Criteria®

Clinical Condition: **Acute Onset Flank Pain — Suspicion of Stone Disease**

Variant 1: **Suspicion of stone disease.**

Radiologic Procedure	Rating	Comments	RRL*
CT abdomen and pelvis without contrast	8	Reduced-dose techniques preferred.	☢☢☢☢
CT abdomen and pelvis without and with contrast	6	If CT without contrast does not explain pain or if without has abnormality that should be further assessed with contrast (ex. stone versus phleboliths).	☢☢☢☢
US kidneys and bladder retroperitoneal with Doppler and KUB	6	Preferred examination in pregnancy, in patients who are allergic to iodinated contrast, and if NCCT is not available.	☢☢
X-ray intravenous urography	4		☢☢☢
MRI abdomen and pelvis without contrast (MR urography)	4		O
MRI abdomen and pelvis without and with contrast (MR urography)	4	See statement regarding contrast in text under “Anticipated Exceptions.”	O
CT abdomen and pelvis with contrast	2		☢☢☢☢
X-ray abdomen and pelvis (KUB)	1	Most useful in patients with known stone disease.	☢☢
Rating Scale: 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

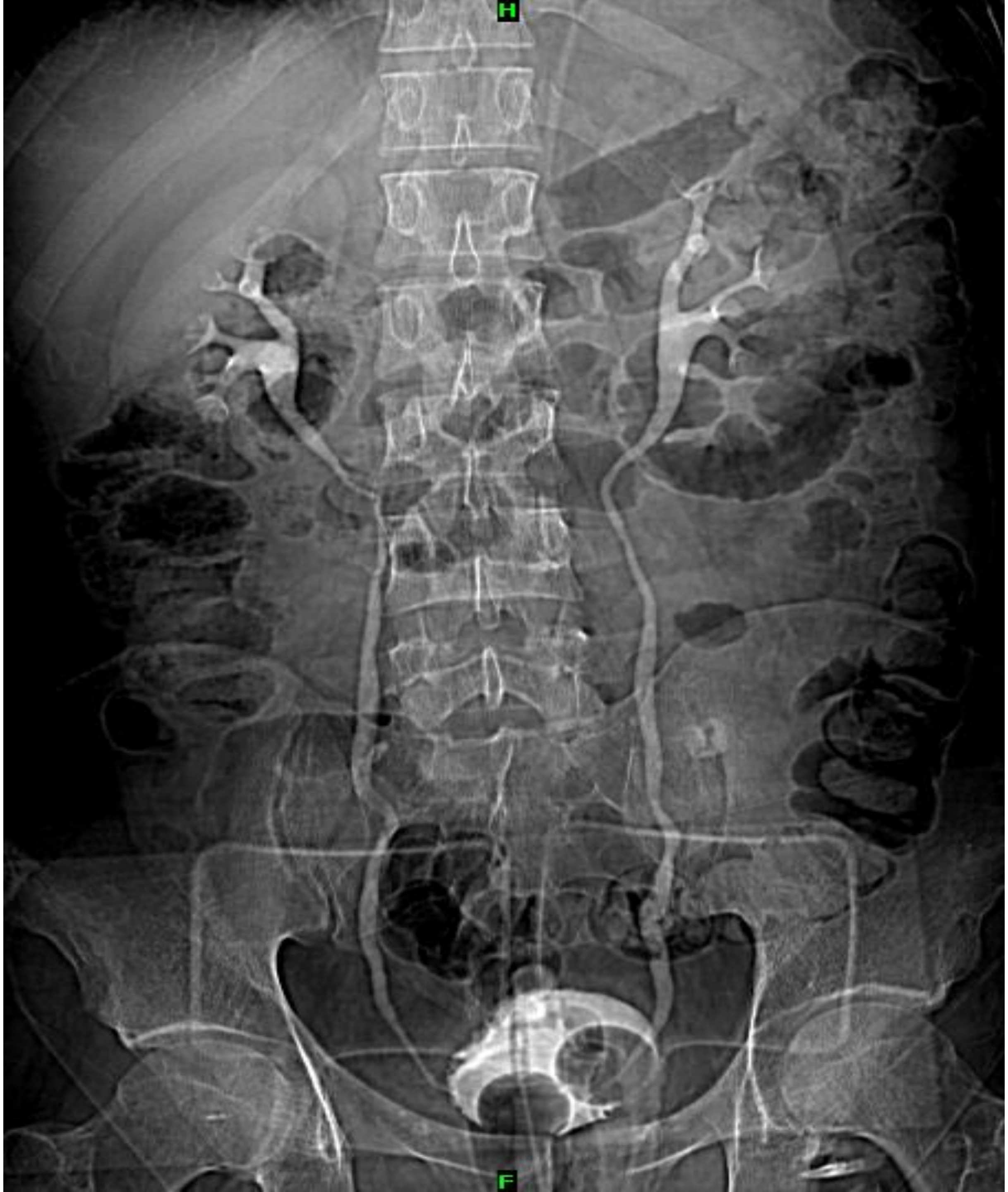
Variant 2: **Recurrent symptoms of stone disease.**

Radiologic Procedure	Rating	Comments	RRL*
CT abdomen and pelvis without contrast	7	Reduced-dose techniques preferred.	☢☢☢☢


Time:10:36:03
No.:3
32fps
34dB/DR60
MapE
RS3/SCOff

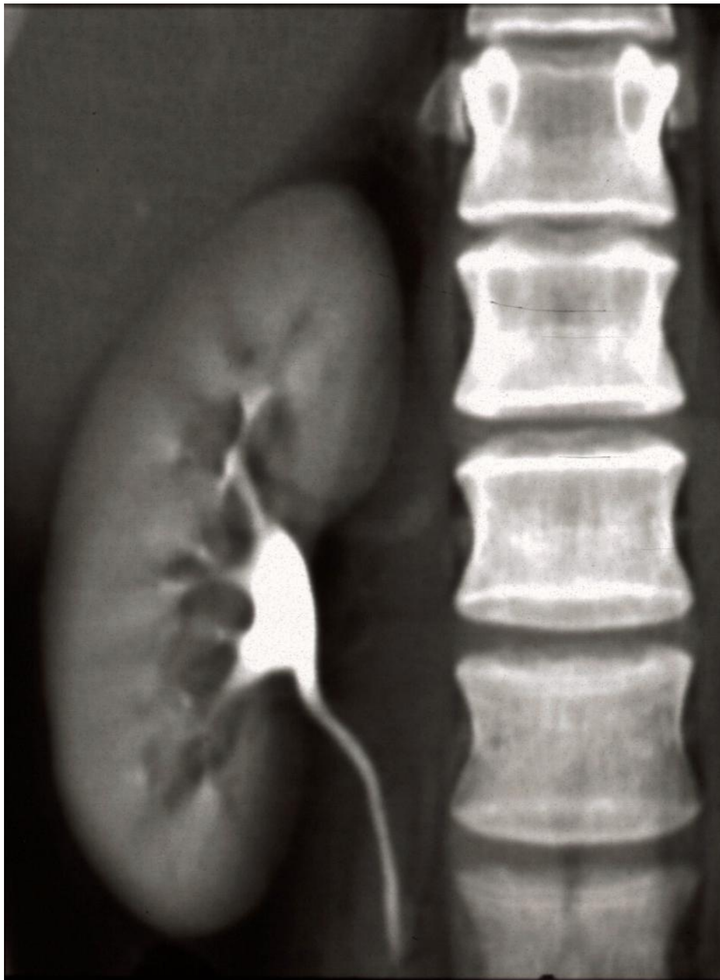
IVP NEDEN ÖLDÜ?

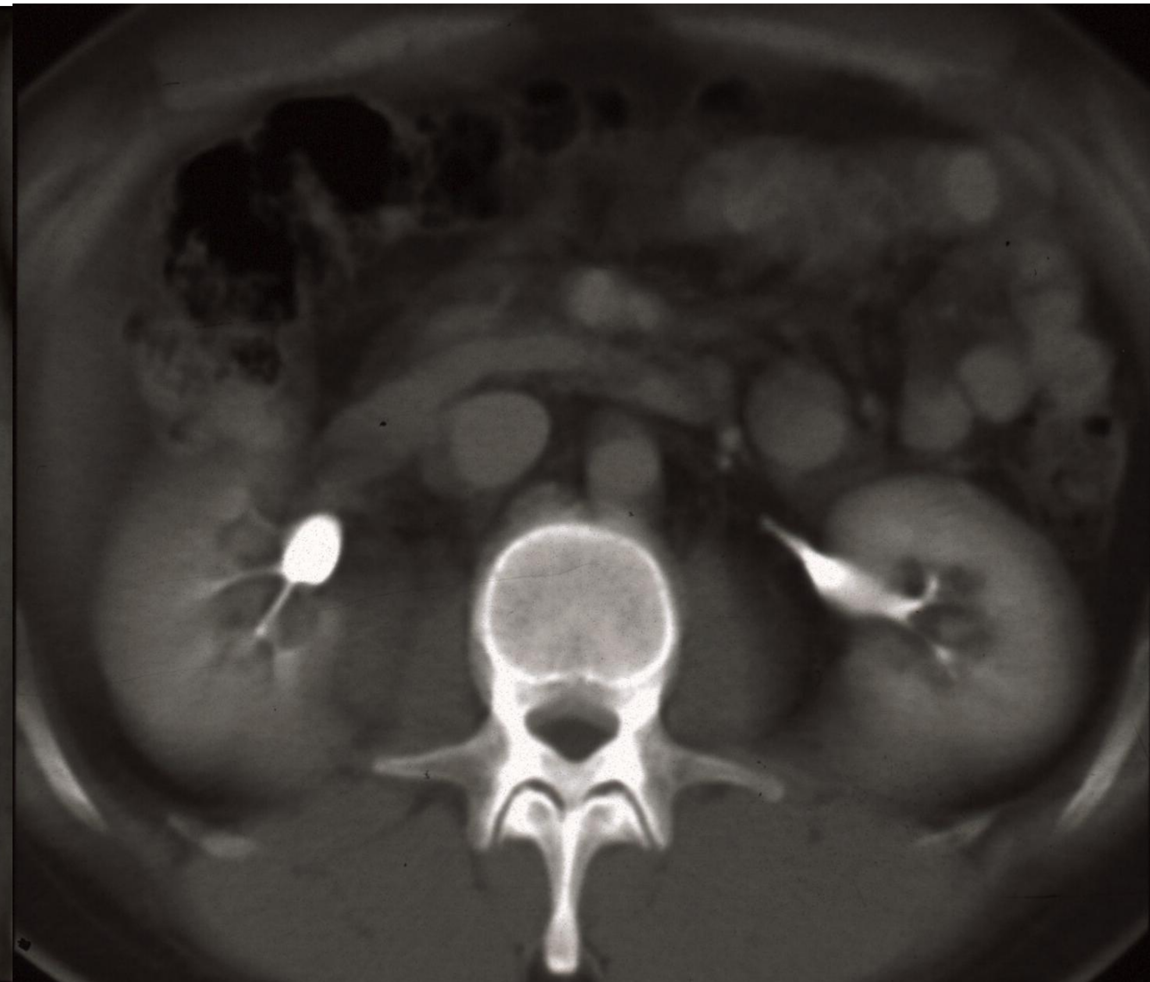
- BÖBREKLERDE KÖRDÜK
  - KİTLELERİ ATLIYORDUK
- SÜZMEYEN BÖBREK
- KONTRAST VERİYORDUK
- DAKİKALIK İVP
- 2BOYUTLU TETKİKLE 3 BOYUTLU DÜNYA
- NE NEREYE AÇILIYOR BİLMİYORDUK


H
F

MR UROGRAFİ

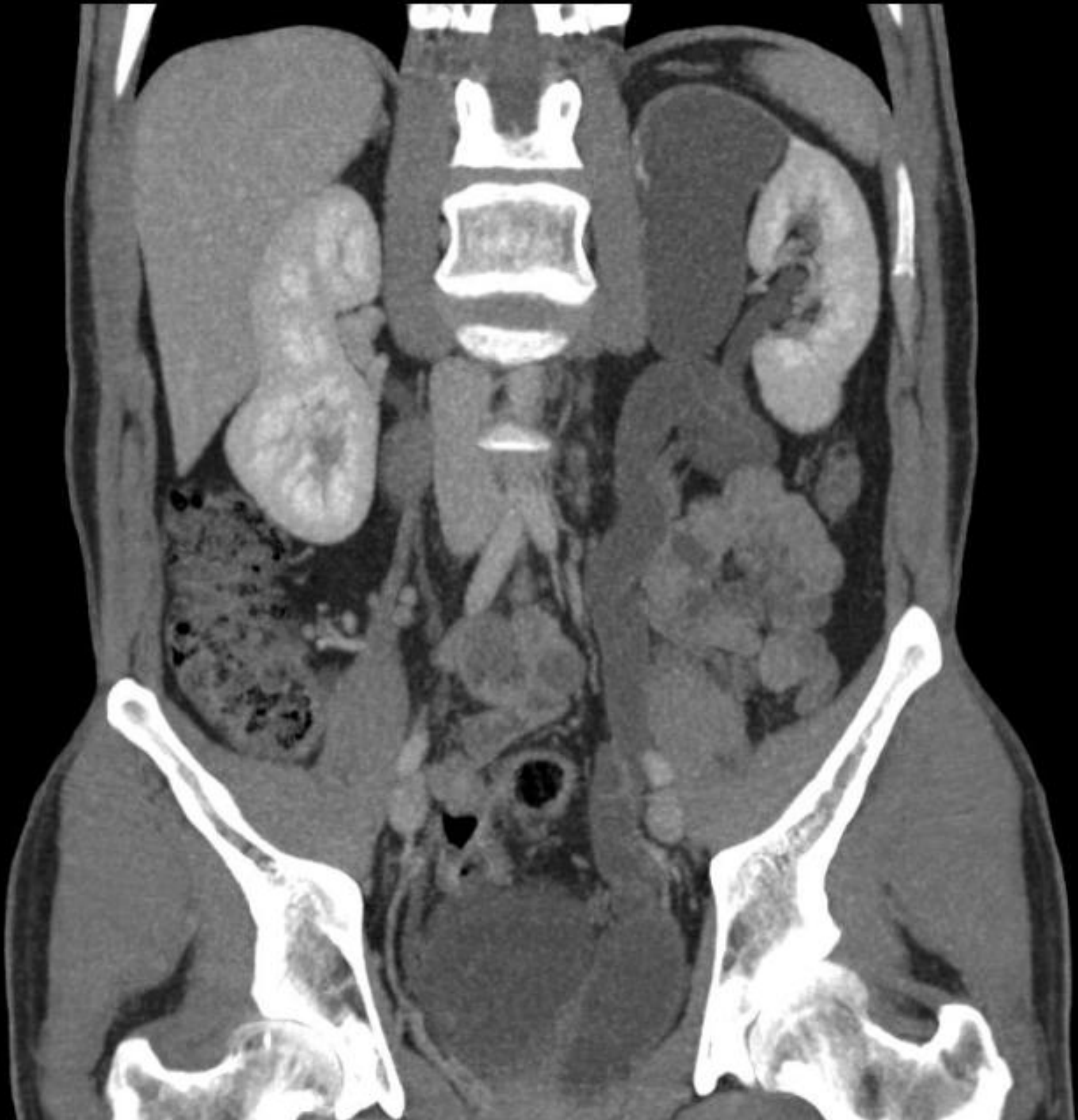
BT UROGRAFİ



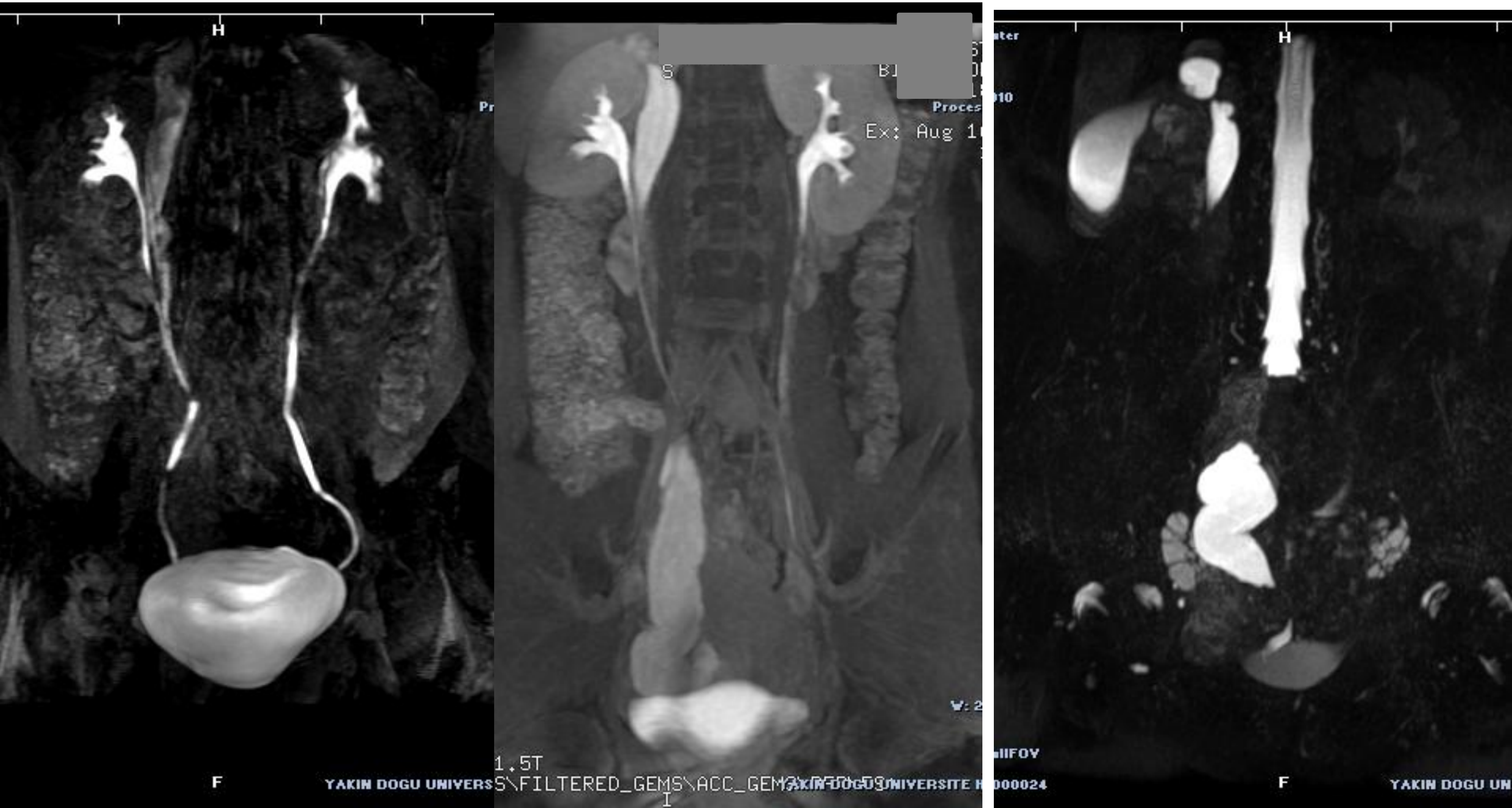



22
URINER S STEM MIP
01-01-32
AN_CT505
29520
R
L
W:350


18-10-54
Philips Medical



17Y K, DAMLAMA



Date of origin: 1995
Last review date: 2013

American College of Radiology
ACR Appropriateness Criteria®

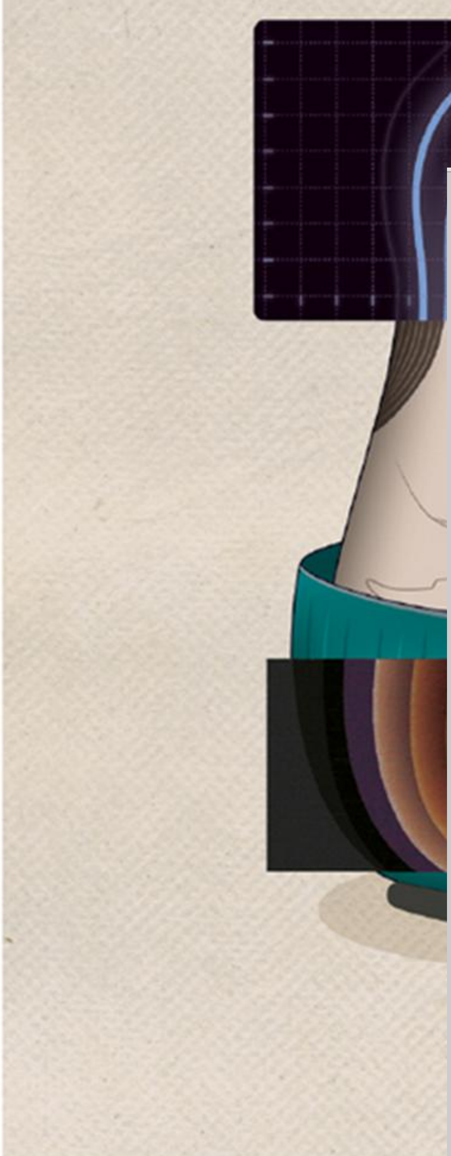
Clinical Condition: **Renal Failure**

Variant 1: **Acute kidney injury (AKI), unspecified.**

Radiologic Procedure	Rating	Comments	RRL*
US kidneys and bladder	9	Assess renal size and echogenicity. Exclude bilateral obstruction in high-risk groups. Doppler may be used to assess renal perfusion.	O
Percutaneous US-guided renal biopsy	6	Especially useful in acute inflammatory conditions such as nephritis. Perform a follow-up after US examination, if needed.	O
Tc-99m MAG3 scan kidney	4	This procedure may be useful if the creatinine level is high. Perform a follow-up after US examination, if needed.	☢☢☢
MRI abdomen without contrast	3	This procedure has a potential role in searching for sonographically unclear causes of ureteral obstruction. A nonenhanced MRI may be helpful in selected cases.	O
MRA abdomen without and with contrast	3	Because the eGFR and creatinine values are unreliable in the setting of AKI, caution should be used when administering intravenous gadolinium Gadolinium-enhanced studies are very effective for renal artery evaluation. See statement regarding contrast in text under “Anticipated Exceptions.”	O
MRA abdomen without contrast	3	This procedure can access renal arterial or venous patency in rare instances when vascular stenosis or thrombosis may account for AKI.	O
Arteriography kidney	3	Potentially helpful in trauma evaluation for renal artery occlusion. Consider using aortography with CO^2 to avoid nephrotoxicity of the iodinated contrast.	☢☢☢
CT abdomen without contrast	3	Potentially helpful in trauma evaluation. Noncontrast helical CT is more sensitive than KUB for calculi. Evaluation of ureteral obstruction due to retroperitoneal diseases, masses, and tumors (hydronephrosis on US but an	☢☢☢

nature OUTLOOK

MEDICAL IMAGING



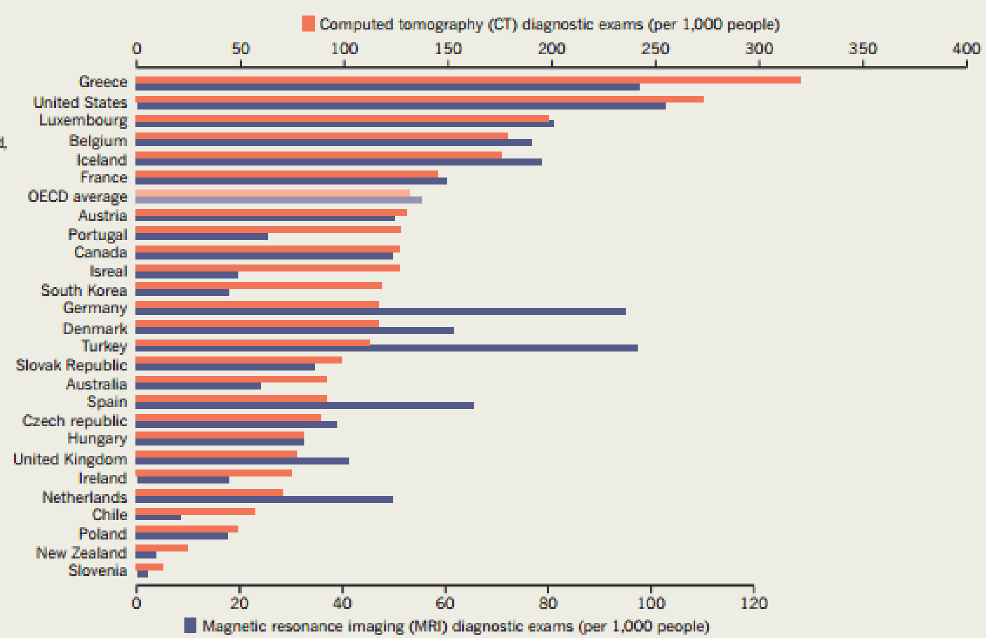
ENHANCED MEDICAL VISION

The ability to look inside the human body without using a scalpel has revolutionized how we diagnose and treat illness and injury. By **Brian Owens**.

UNEVEN DISTRIBUTION

The number of scans per 1,000 people varies widely around the world. In some cases, such as New Zealand, the number may be underestimated because the data only include procedures paid for with public funds.

Greece tops the list in number of CT scans because it has a large number of scanners, with the vast majority based in private clinics, and there are no official guidelines governing their use.



TO LIBRARY; X-RAY: DEPT. OF CLINICAL
CE PHOTO LIBRARY

HEMATÜRİ

Date of origin: 1995
Last review date: 2014

American College of Radiology
ACR Appropriateness Criteria®

Clinical Condition: **Hematuria**

Variant 1: **Patients with vigorous exercise, presence of infection or viral illness, or present or recent menstruation.**

Radiologic Procedure	Rating	Comments	RRL*
US kidneys and bladder retroperitoneal	3		O
CT abdomen and pelvis without and with contrast	2		☢☢☢☢
CT abdomen and pelvis with contrast	2		☢☢☢☢
CT abdomen and pelvis without contrast	2		☢☢☢☢
X-ray intravenous urography	2		☢☢☢
MRI abdomen and pelvis without and with contrast	2		O
MRI abdomen and pelvis without contrast	2		O
X-ray retrograde pyelography	1		☢☢☢
Arteriography kidney	1		☢☢☢
X-ray abdomen and pelvis (KUB)	1		☢☢
Rating Scale: **1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate**			***Relative Radiation Level**

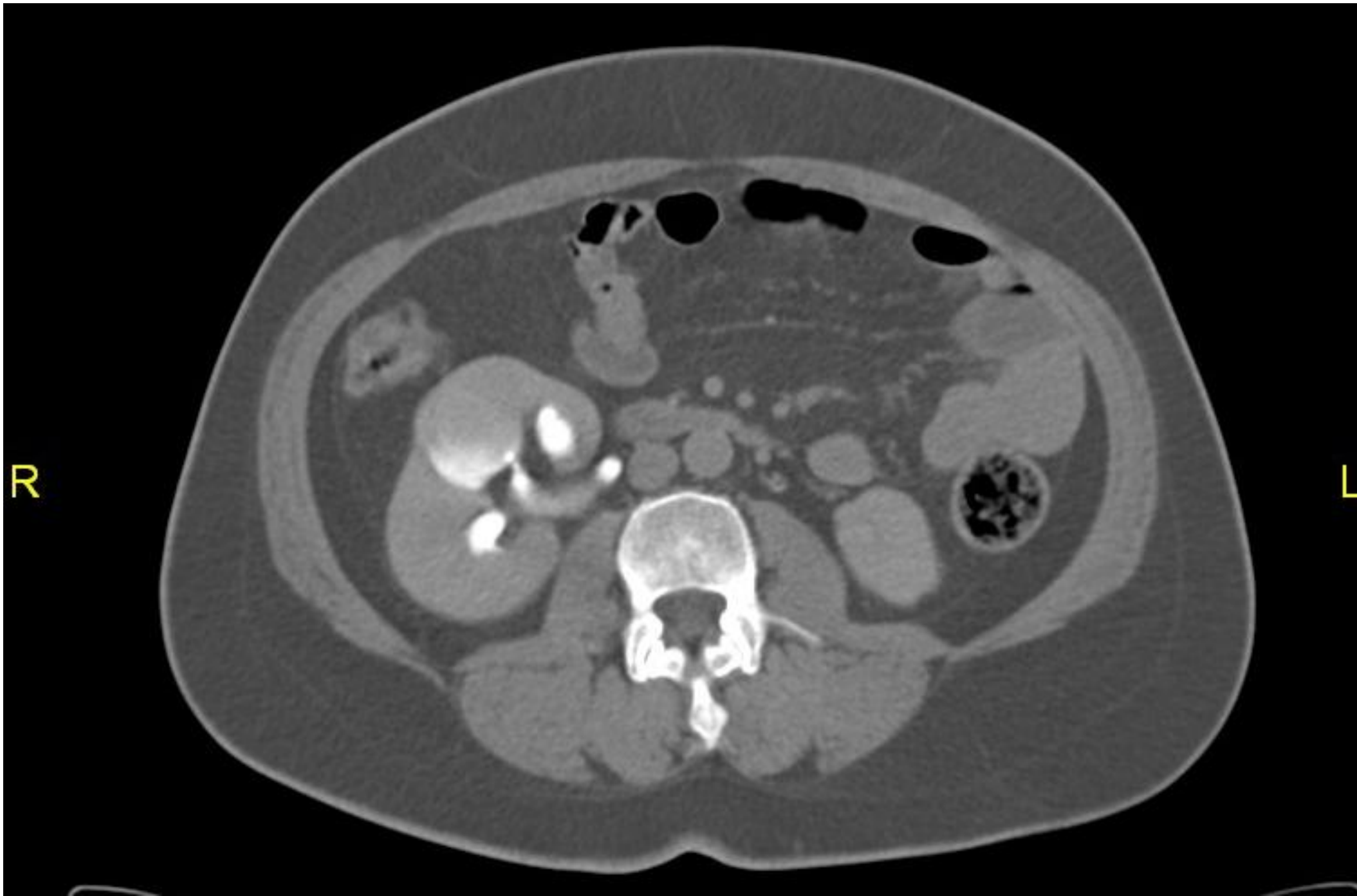
Variant2: **Patients with disease of renal parenchyma as the cause of hematuria.**

Clinical Condition: **Hematuria**

Variant3: **All patients except those described in variant 1 or 2.**

Radiologic Procedure	Rating	Comments	RRL*
CT abdomen and pelvis without and with contrast	9	CT urography. Must include high-resolution imaging during excretory phase.	☢☢☢☢
CT abdomen and pelvis without contrast	6		☢☢☢☢
X-ray retrograde pyelography	6	For patient with contraindication to iodinated contrast or strong suspicion of urothelial lesion, to clarify abnormality suspected on CT or IVU.	☢☢☢
CT abdomen and pelvis with contrast	5	This procedure may be appropriate but there was disagreement among panel members on the appropriateness rating as defined by the panel's median rating.	☢☢☢☢
US kidneys and bladder retroperitoneal	5		O
MRI abdomen and pelvis without and with contrast	5	MR urography. For patients with contraindication to iodinated contrast.	O
MRI abdomen and pelvis without contrast	4		O
Arteriography kidney	2		☢☢☢
X-ray abdomen and pelvis (KUB)	2		☢☢
X-ray intravenous urography	1		☢☢☢
Rating Scale: **1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate**			***Relative Radiation Level**

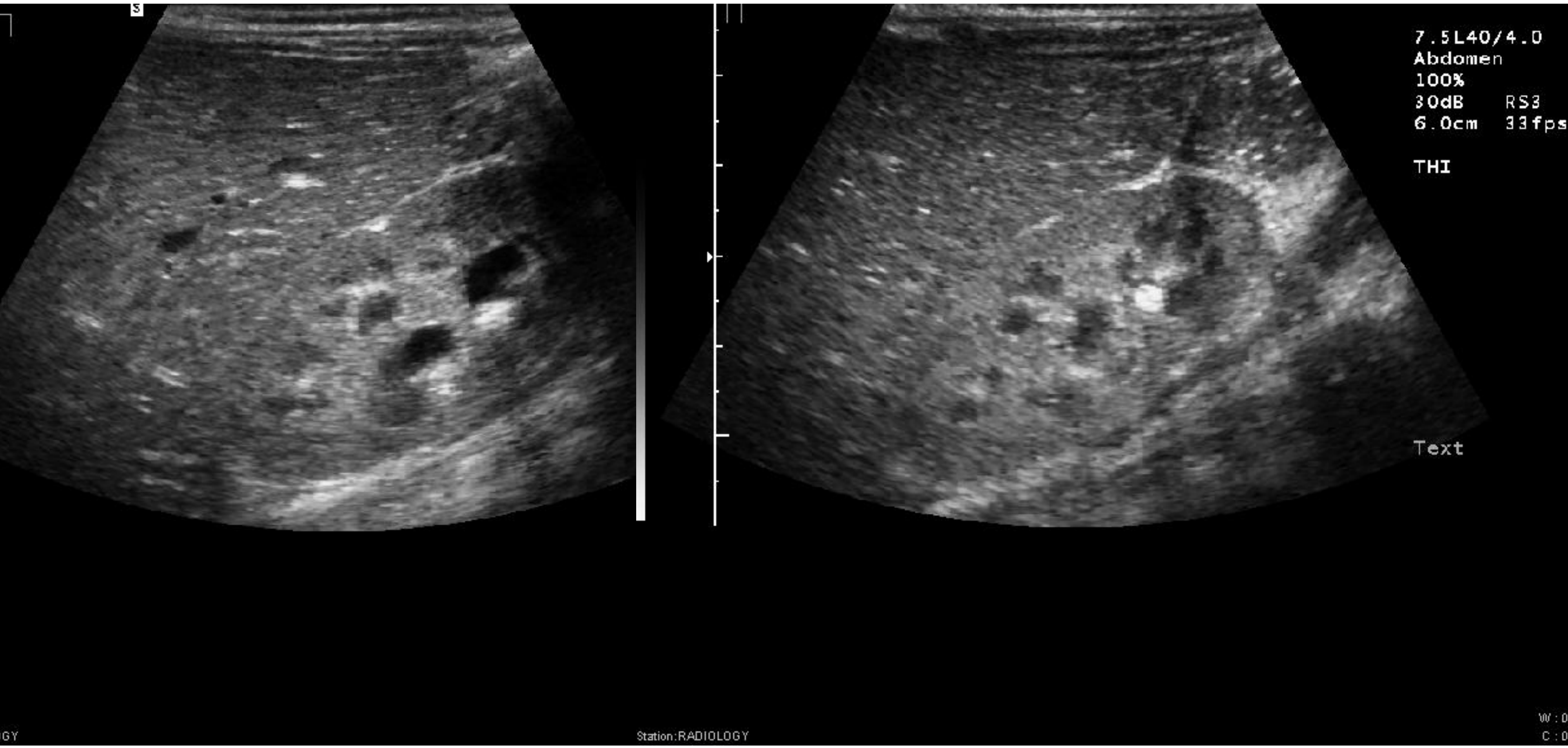
KALİSİYEL DİVERTİKÜL



ULTRASONOGRAFİ

- BOYUT
- EKOJENİTE
- TAŞ
- MEDÜLLER NEFROKALSİNOZİS
- VASKÜLER YAPILAR
- KİST, ANJİYOMYOLİPOM

TAŞ


7.5L40/4.0
Abdomen
100%
30dB RS3
6.0cm 33fps
THI
Text
Station:RADIOLOGY

ULTRASONOGRAFİ

Urology. 2014 Aug;84(2):285-8. doi: 10.1016/j.urology.2014.04.010. Epub 2014 Jun 5.

The efficacy of ultrasonography for the detection of renal stone.

Kanno T[1], Kubota M[2], Sakamoto H[3], Nishiyama R[2], Okada T[2], Higashi Y[2], Yamada H[2].

Author information

Abstract

OBJECTIVE: To assess the efficacy of ultrasonography (US) for detecting renal stone using noncontrast enhanced computed tomography (NCCT) as a standard reference.

METHODS: We performed a retrospective study of 428 patients who underwent NCCT and US imaging on the same day from January 2009 to September 2011. The sensitivity of US to detect each individual stone and at least 1 stone per kidney was evaluated. The detection rates according to the location and stone size were also examined. We compared the sizes of stones determined in the longest axis of NCCT and US, and performed group classification based on size to examine whether stone sizes measured by NCCT and US were similar.

RESULTS: Of 856 kidneys, NCCT detected 474 stones in 361 kidneys, whereas US detected 332 stones of 474 stones detected by NCCT, yielding a sensitivity of 70.0% and a specificity of 94.4%. Similarly, US alone detected at least 1 stone in 285 kidneys, yielding a sensitivity of 78.9% and a specificity of 83.7%. Expectedly, the detection rate for the left upper calyx was lower than that for other sites (P = .002), and the detection rate increased with stone size. Furthermore, stone sizes obtained by US were positively correlated with those obtained by CT, and stone size measurement by NCCT and US was concordant in 240 of 332 cases (72%). Importantly, stone size was only a factor that affected renal stone diagnosis using US.

CONCLUSION: US is an effective imaging modality for detecting renal stones.

TS

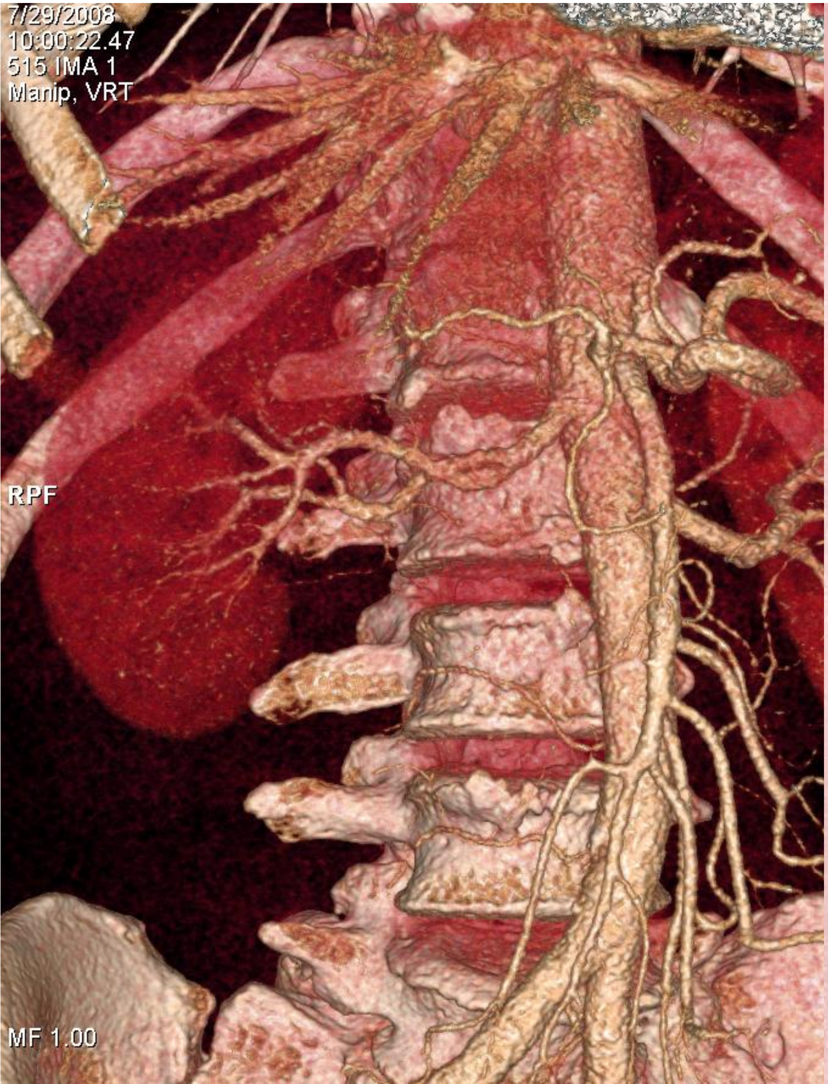

Date:
Time:
No.:1
x 0.4
MI 1.1
7.5L40/4.0
Abdomen
100%
4dB
RS1
5.0cm
25fps
THI
Text

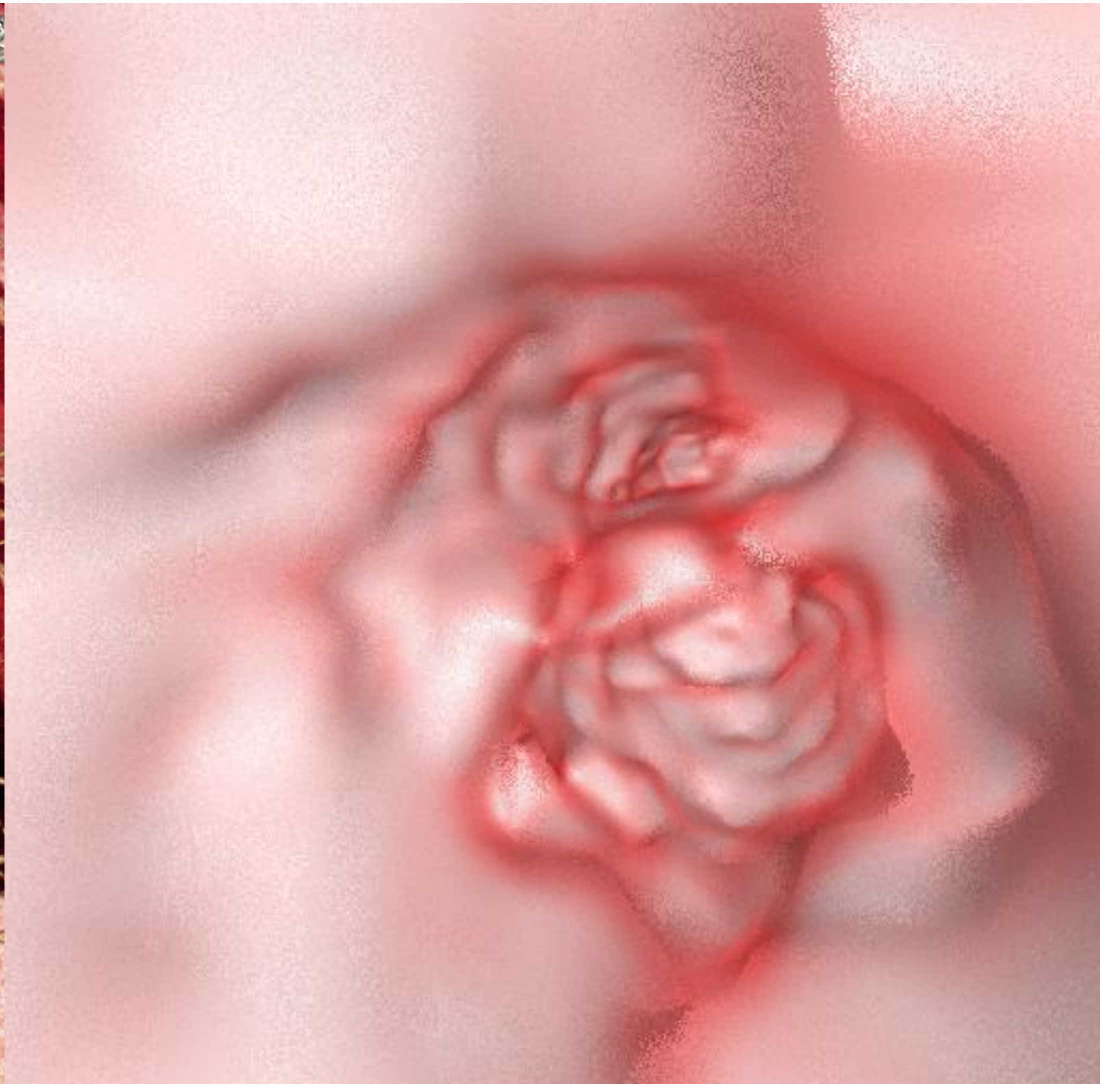
ULTRASONOGRAFİ KÖR MÜDÜR?

- PERFÜZYON DEĞİŞİKLİKLERİ
- BASİT KİST DIŞINDAKİ KİSTLER
- PARENKİMAL DEPO Hx
- OBEZ HASTALAR

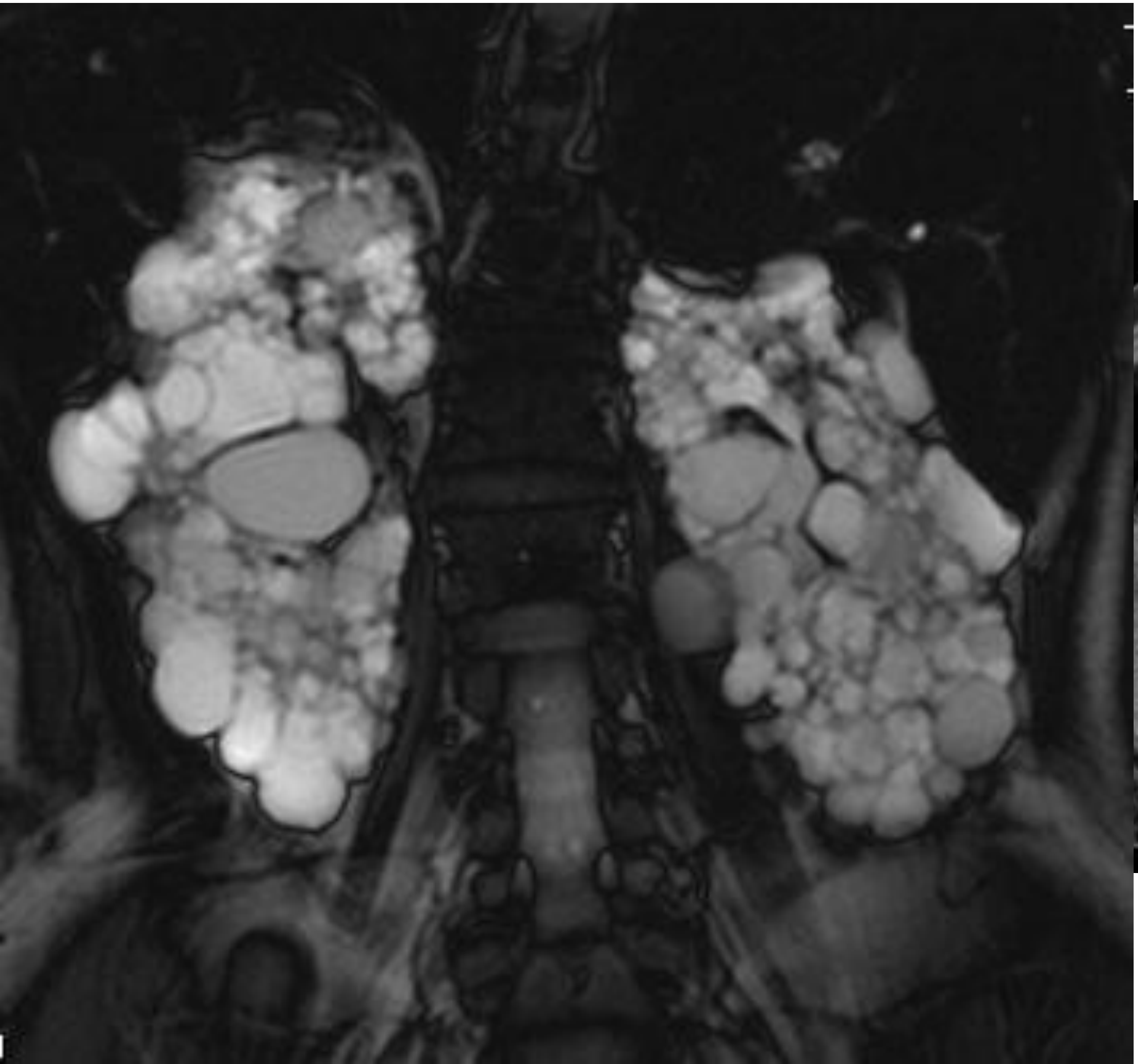
ENFARKT

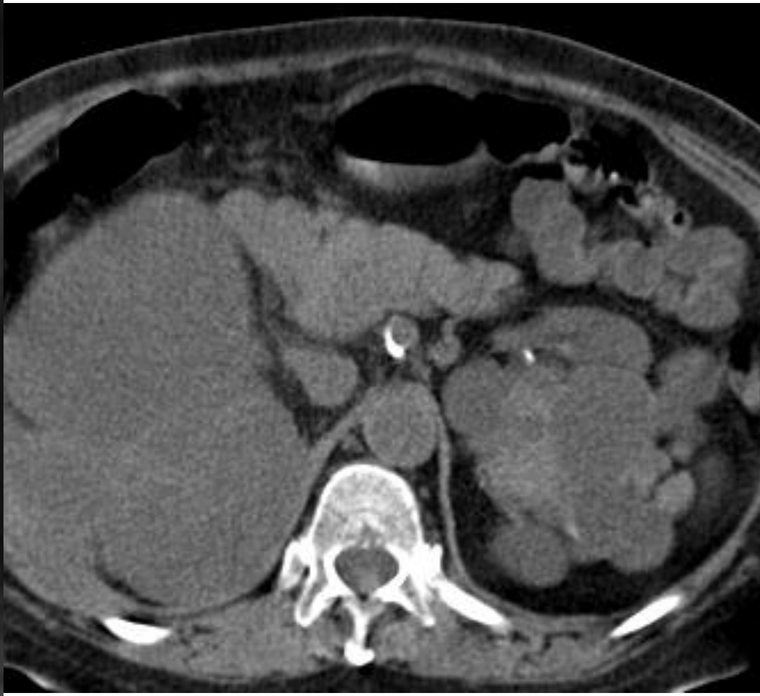
SANAL ANJİYOSKOPİ – OLGU 1
52 Y ERKEK AĞRI…



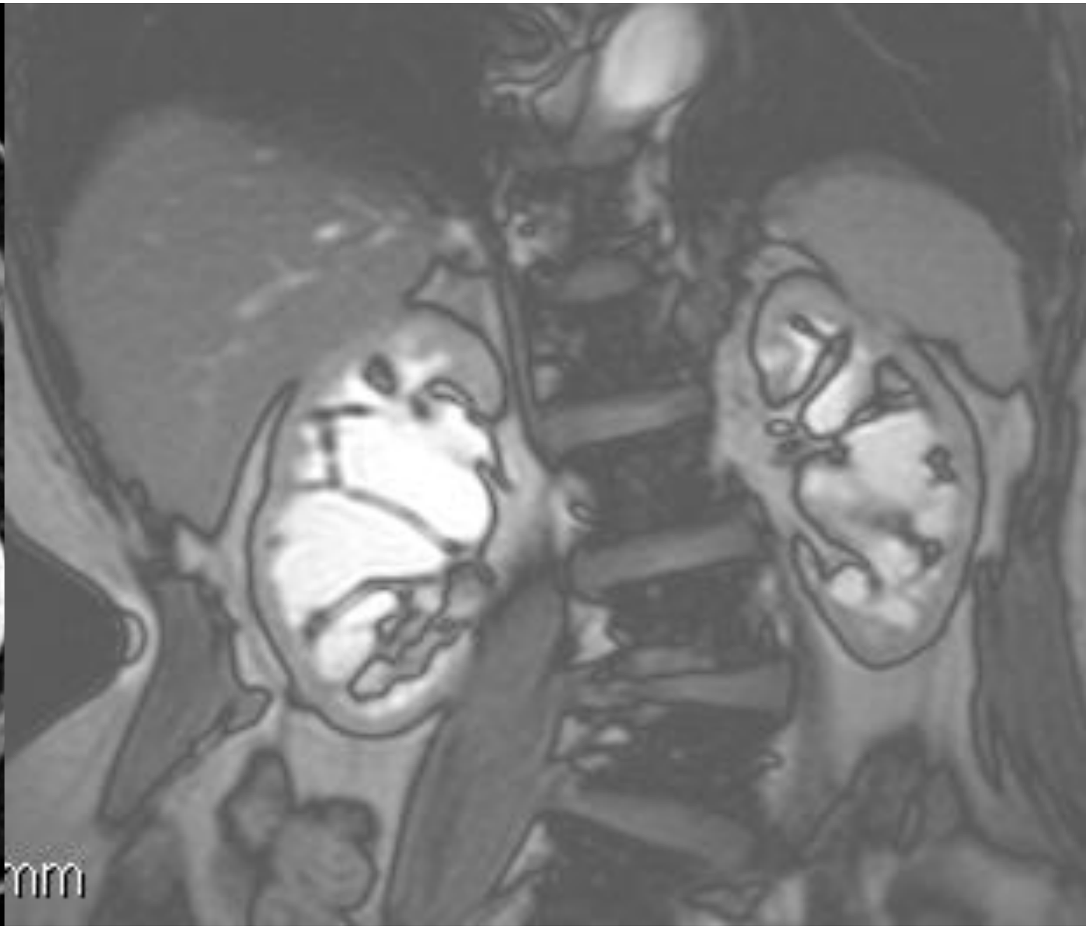


POLİKİSTİK HASTALIK

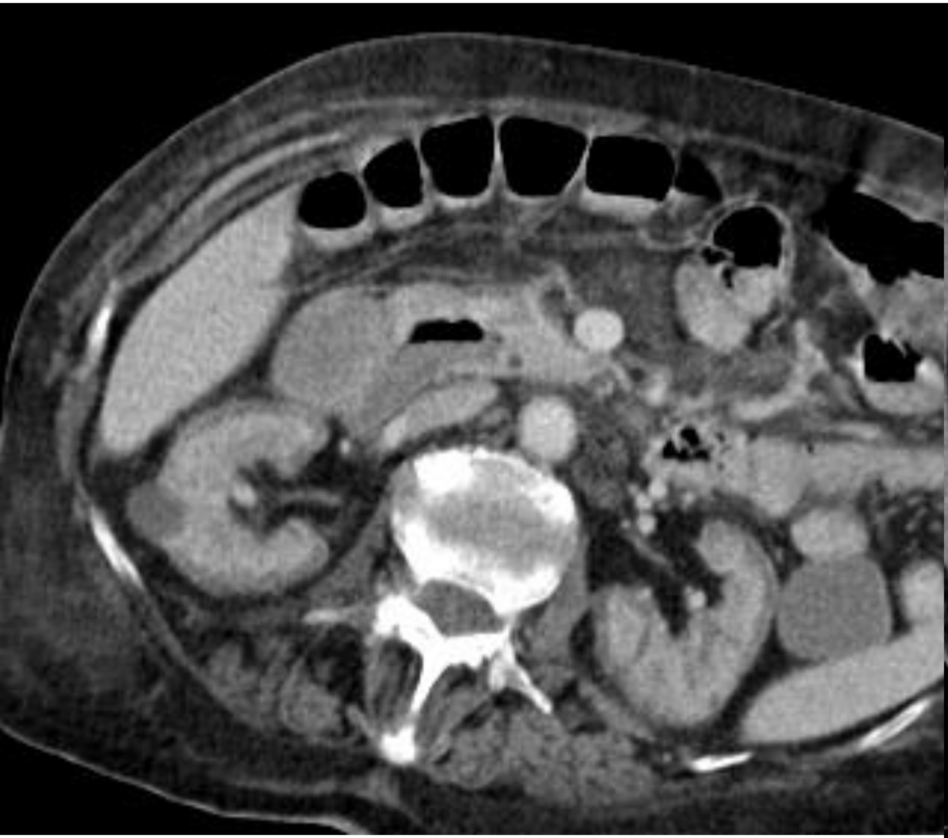


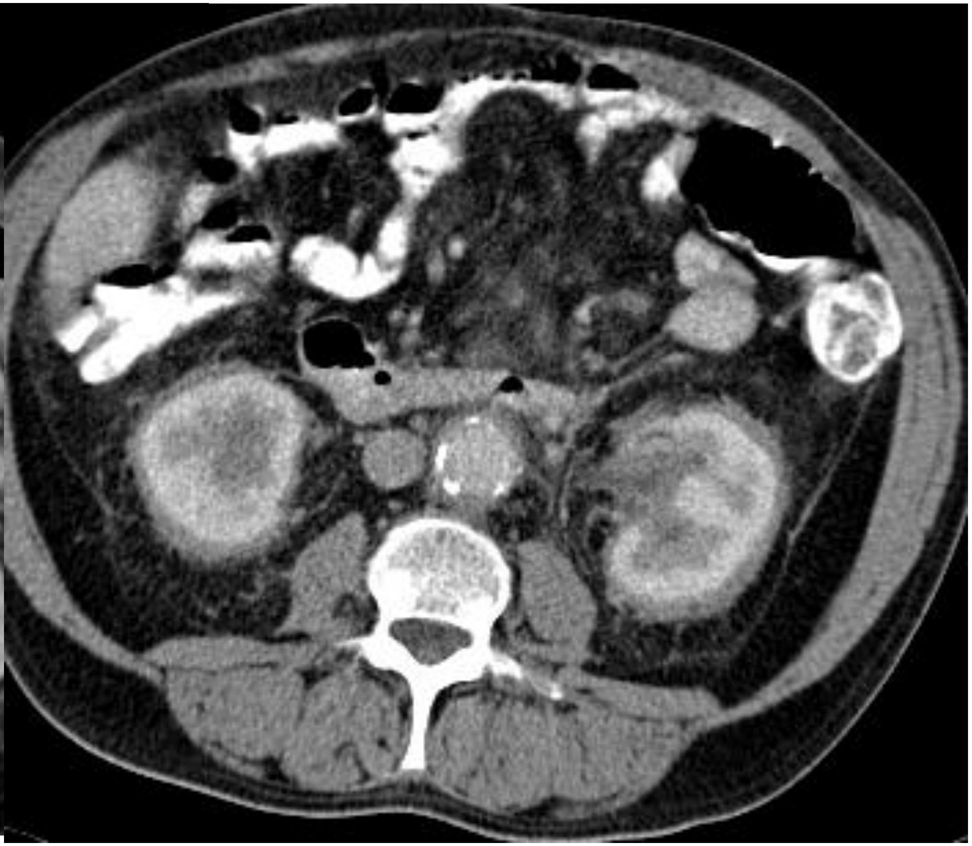


PARAPELVİK KİSTLER

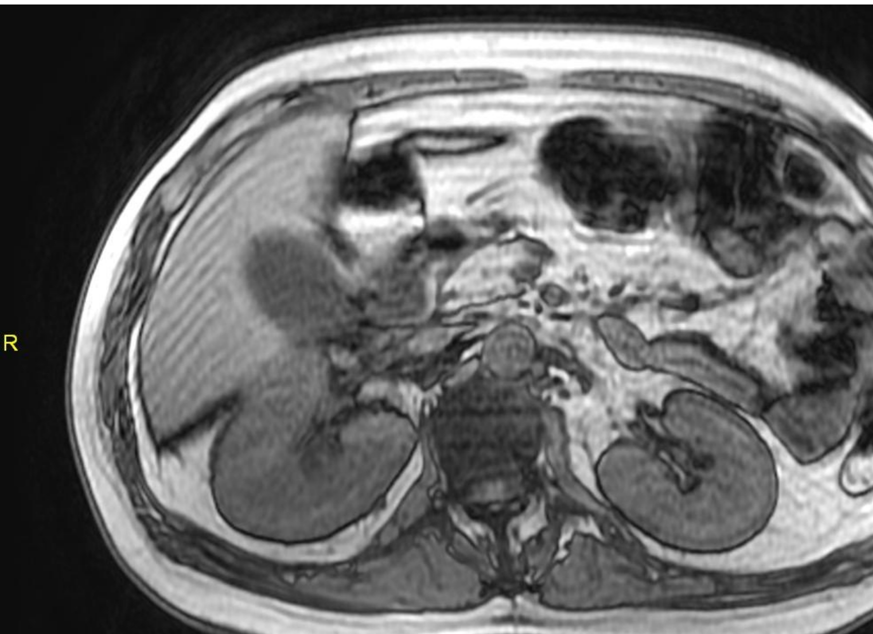


KORTİKAL NEKROZ - FİBROZİS





PAROKSİZMAL NOKTURNAL HBÜRİ



HİPERTANSİYON

Treatment of Hypertension from Renal Artery Entrapment by Percutaneous CT-Guided Botulinum Toxin Injection into Diaphragmatic Crus as Alternative to Surgery and Stenting

Aslan Bilici[1]
Musturay Karcaaltincaba[2]
Ahmet Turan Ilica[3]
Yasar Bukte[1]
Ayhan Senol[1]

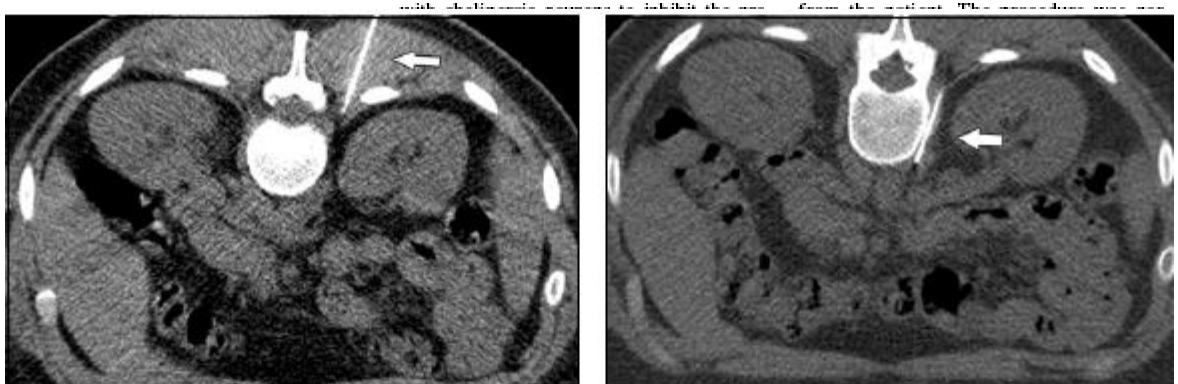
OBJECTIVE. Our objective was to describe the technique and outcome of CT-guided injection of botulinum toxin into the diaphragmatic crus in a patient with hypertension caused by left diaphragmatic crus compression of the left renal artery.

CONCLUSION. After the procedure, the patient's hypertension disappeared. We propose this technique, which directly targets inhibition of overactivity of the diaphragmatic crus, for treatment of hypertension caused by diaphragmatic compression of the renal artery as an alternative to surgery and renal artery stenting.

Renal artery entrapment by the diaphragmatic crus was first described by d'Abreu and Strickland [1] who reported two cases that were proven by surgery in 1962. Surgery and stenting have been used for treatment of renal entrapment syndrome. But the indications for endovascular treatment with stenting or surgical bypass need to be further defined [2]. Botulinum toxin type A (BTX-A) is an extremely potent neurotoxin that interacts selectively

(Fig. 1). The left diaphragmatic crus appeared prominent and accessible through the percutaneous route on axial CT images. Despite the combination of doxazosin mesylate 2 mg and amlodipine besilate 10 mg for 3 months, the patient's blood pressure remained stable at 160/110 mm Hg. A CT-guided botulinum toxin injection procedure was planned to reduce the compression of the renal artery by the diaphragmatic crus.

Written informed consent was obtained



GELECEK

- DİFÜZYON AĞIRLIKLI GÖRÜNTÜLEME
- OKSİJENASYON
- PERFÜZYON
- DAHA KANTİTATİF

SERÜVEN

- DİREK GRAFİ
- IVP
- US
- İLGİNÇ OLGULAR
- GELECEK