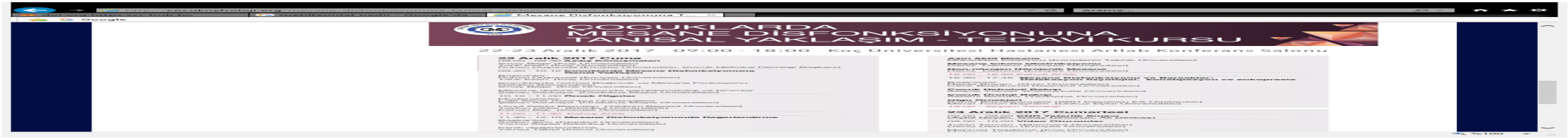
NON-NÖROJEN NÖROJENİK MESANE
(HİNMAN SENDROMU)

Prof. Dr. Deniz Demirci

Erciyes Üniversitesi Tıp Fakültesi

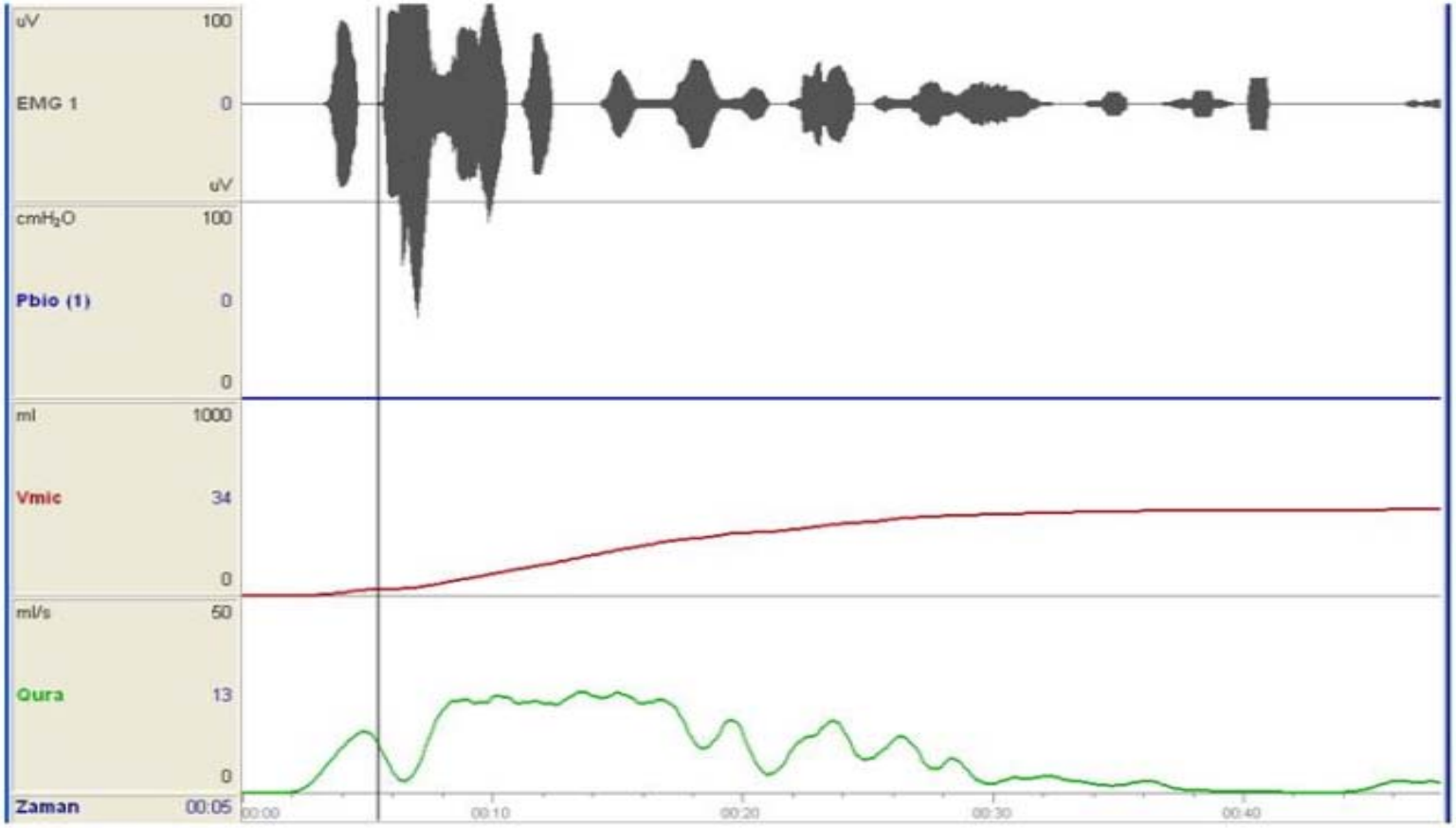
Çocuk Üroloji Bilim Dalı - KAYSERİ



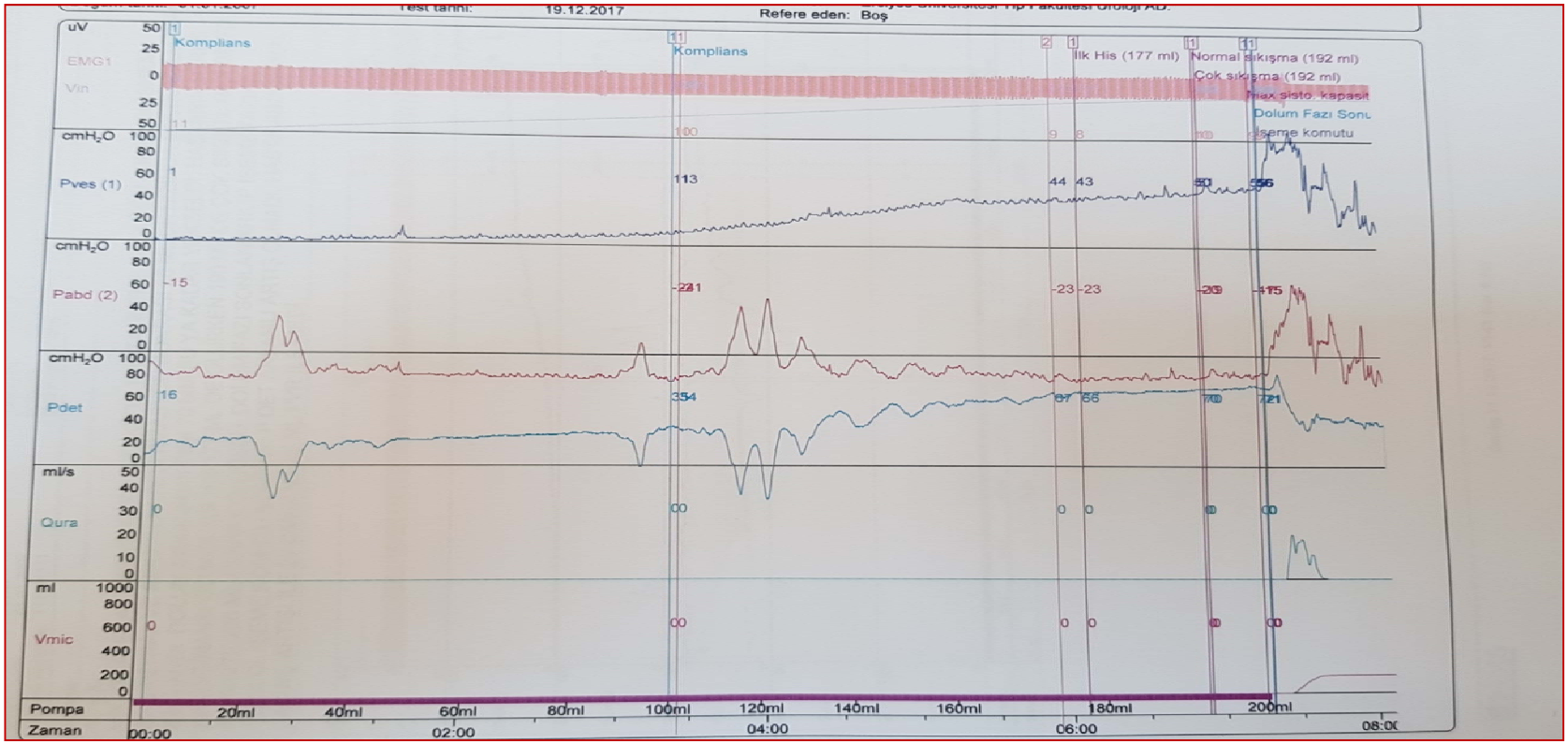
OLGU 1

- 10 y, K
- 4 yaşından beri sık idrar yolu enfeksiyonu
- İşeme disfonksiyonu
- Yılda 3 kez ateşli İYE atağı oluyormuş
- Oksibutinin başlanmış
- Alerji gelişmesi üzerine 2 ay içinde ilaç kesilmiş
- Daha sonra ikili işeme önerilmiş
- Bioofeedback programı yarıda kalmış
- 1 yıldır Cardura 2 mg kullanıyor
- Ek dahili ,nörolojik hastalık yok

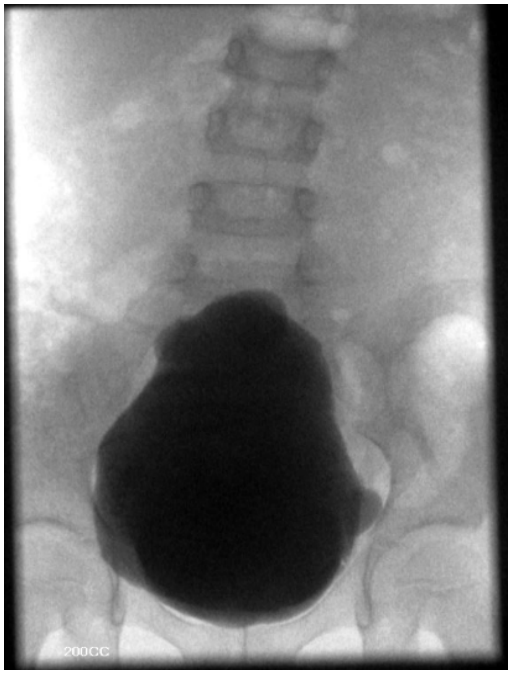
EMG Lİ ÜROFLOW

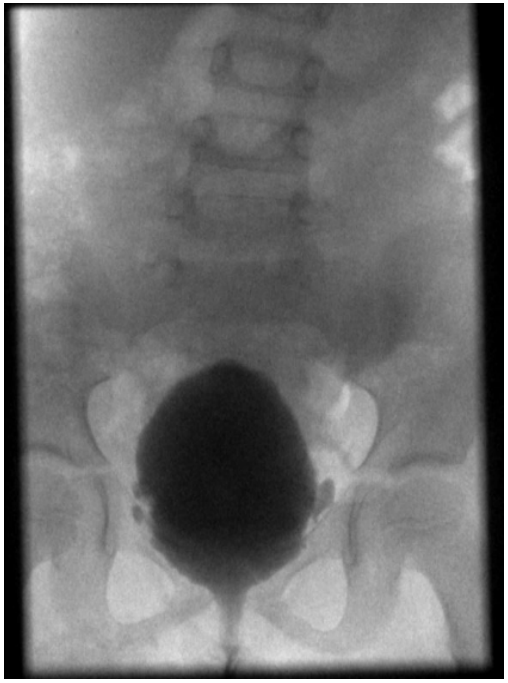


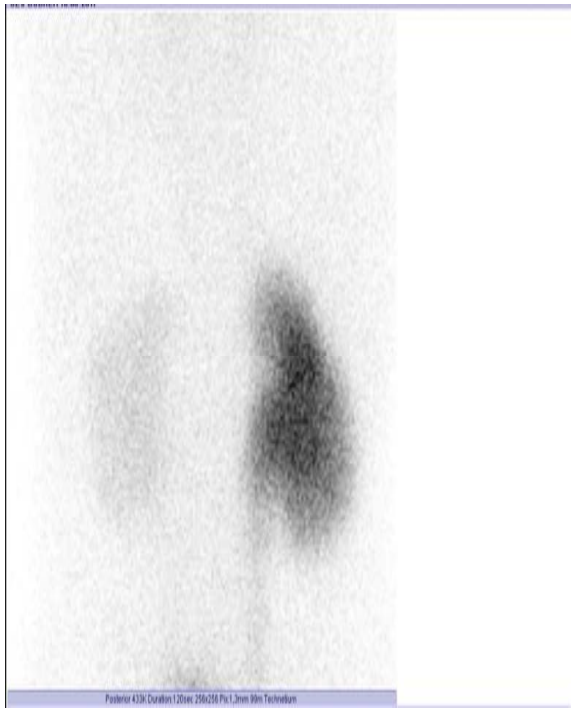
ÜRODİNAMİ


Test tarihi: 19.12.2017
Refere eden: Boş
uV
EMG1
Vin
Komplians
Komplians
İlk His (177 ml)
Normal sıkışma (192 ml)
Çok sıkışma (192 ml)
Max sisto. kapasit
Dolum Fazı Sonu
İşeme komutu
cmH2O
Pves (1)
Pabd (2)
Pdet
ml/s
Qura
ml
Vmic
Pompa
Zaman
20ml
40ml
60ml
80ml
100ml
120ml
140ml
160ml
180ml
200ml
00:00
02:00
04:00
06:00

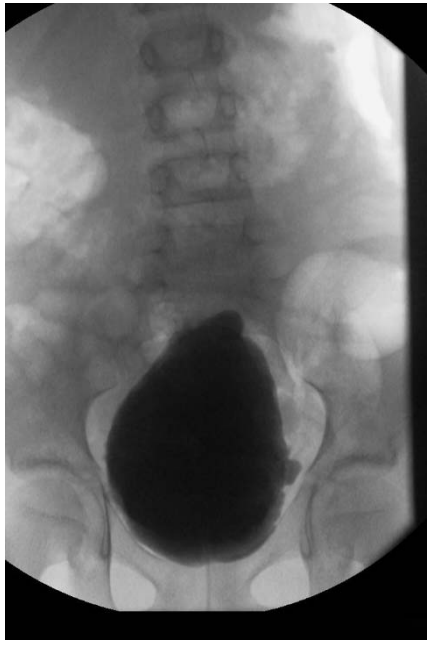
İŞEME SİTOÜRETROGRAM ,DMSA (2015)

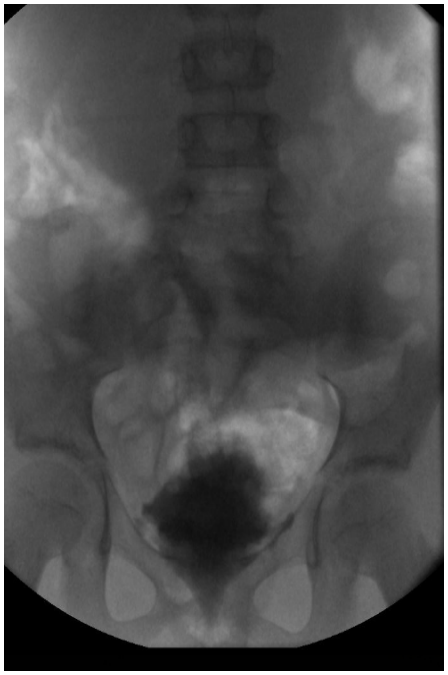


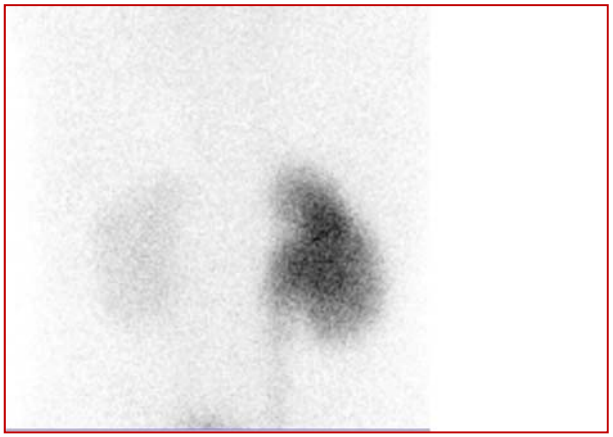




VOİDİNG SİSTOÜRETROGRAFİ-2017







Halen takipte , işemekte zorlanıyor, zaman zaman ıslatmaları var , cr 0.5

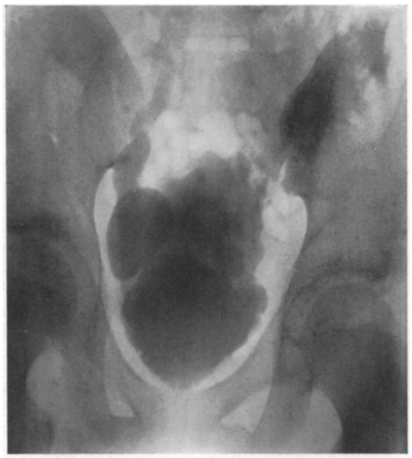
TARİHÇE

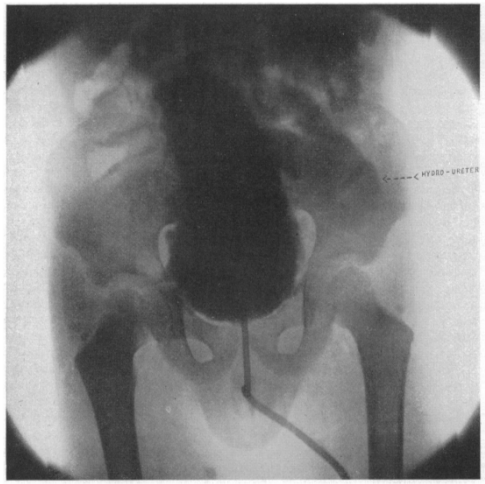
- 1915 … Edwin Beer
- 1973…. Hinman F and Bauman FW
- 1977…. Allen TD
- 1997…. Jayatnthi VR

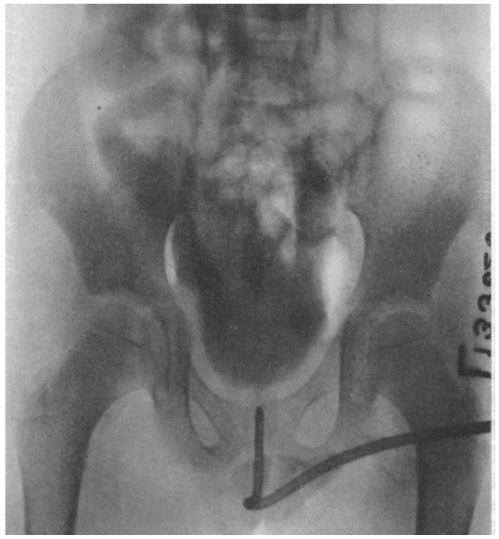
CHRONIC RETENTION OF URINE IN YOUNG BOYS DUE TO OBSTRUCTION AT THE NECK OF THE BLADDER*

By Edwin Beer, M.D.
of New York, N. Y.

About eight years ago under the title "Chronic Retention of Urine in Children," I brought together a study of this condition as illustrated by a series of nine personal observations and published same in the *Journal of the American Medical Association*. Since this publication it has been my good fortune to be able to study more than twenty cases of the same condition. I propose in this paper to describe three of these cases, treated by me with considerable success and again call attention to this unusual clinical entity.







Annals Of Surgery,79,264-9, 1924

0022-5347/02/1672-1069/0
THE JOURNAL OF UROLOGY®

Vol. 167, 1069–1073, February 2002
Printed in U.S.A.

VESICAL AND URETERAL DAMAGE FROM VOIDING DYSFUNCTION IN BOYS WITHOUT NEUROLOGIC OR OBSTRUCTIVE DISEASE

FRANK HINMAN AND FRANZ W. BAUMANN

From the Division of Urology, University of California School of Medicine and the Service of Urology and Department of Pediatrics, Children's Hospital, San Francisco, California

(Reprinted from J Urol, 109: 727–732, 1973)

A symptom complex of enuresis and daytime wetting associated with urinary tract infection and, often, with upper tract dilatation was seen in 14 boys in whom intensive pediatrician but the fact that infection was occurring in boys led to complete urologic evaluation.

Radiologic abnormalities. Excretory urograms (IVPs) from

An 8-year-old boy was seen on August 3, 1970 with day and night wetting, infected urine, and x-ray evidence of a Christmas tree bladder and upper tract damage. Diagnosis was a neurogenic bladder. However, the pediatric neurological consultant could find no deficits. That evening a pediatric colleague hypnotized the boy and the next morning the nurses reported that he was continent. It became obvious that voiding function could be disturbed grossly through psychological malfunction. Be-

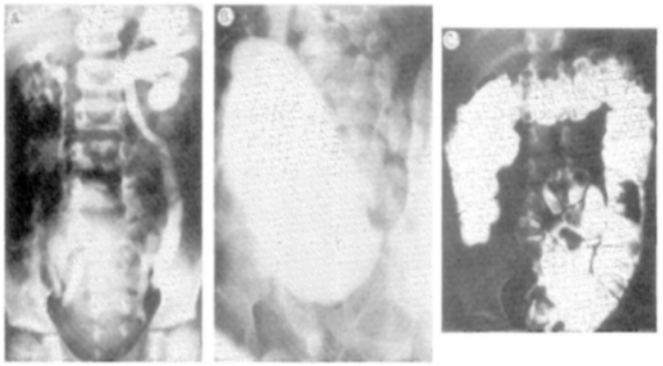


FIG. 3. Case 1. *A*, initial IVP shows bilateral ureterovesical junction obstruction, with renal damage from back pressure and infection. *B*, initial voiding cystogram shows Christmas tree bladder and poorly filled urethra. *C*, initial barium enema shows large colon filled with boluses of fecal matter.

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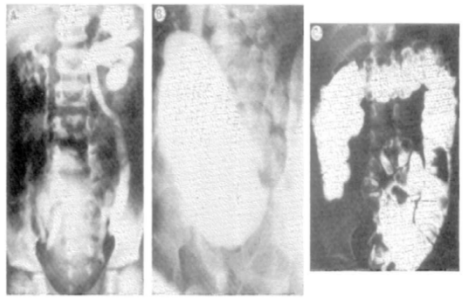
Radiologic abnormalities. Excretory urograms (IVPs) from

Findings in 14 cases of vesicourethral incoordination

	Present No. Pts.	Absent No. Pts.
Enuresis	12	2
Daytime wetting	12	2
Encopresis	6	8
Urinary tract infection	11	3
Vesical trabeculation	12	2
Ureterovesical junction abnormality	8	6
Neurologic disorder	0	14
Outlet obstruction	0	14



...o. 3. Case 1. *A*, initial IVP shows bilateral ureterovesical junction obstruction, with renal damage from back pressure and infection. *B*, ...ial voiding cystogram shows Christmas tree bladder and poorly filled urethra. *C*, initial barium enema shows large colon filled with boluses of fecal matter.

Mesane kontraksiyonu ile pelvik taban kasları arasında diskordinasyon var

Neden psikolojik

0022-5347/86/1364-0769$02.00/0
THE JOURNAL OF UROLOGY

Vol. 136, October
Printed in U.S.A.

State of the Art

NONNEUROGENIC NEUROGENIC BLADDER (THE HINMAN SYNDROME)–15 YEARS LATER

FRANK HINMAN, JR.*

From the Department of Urology, University of California, San Francisco, California

1. Enuresis ..İnhibe edilemeyen detrusor kontraksiyonları
2. Eksternal sfinkterin aktivitesinin artması

GÜN BOYUNCA İDRAR KAÇIRMA

ÜRİNER SİSTEMİ KAPSAYAN YAPISAL DEĞİŞİKLİKLER

THE JOURNAL OF UROLOGY
Copyright © 1977 by The Williams & Wilkins Co.

Vol. 117, February
Printed in U.S.A.

Pediatric Articles

THE NON-NEUROGENIC NEUROGENIC BLADDER

TERRY D. ALLEN
From the Division of Urology, The University of Texas, Southwestern Medical School, Dallas, Texas

Forty years experience with voiding dysfunction

T.D. ALLEN
University of Texas Southwestern Medical School, Dallas, Texas, USA

nörojenik neden yok

fonksiyonel sorun mesane ve sfinkter arasındaki diskordinasyon

HINMAN –ALLEN

FIG. 1. a, Excretory urogram of a girl with UTI and wetness at 2.5 years old, showing a distended bladder and grade II right sided hydronephrosis. b, A cystogram in the same girl at 13 years of age. (From [17], reproduced with permission).

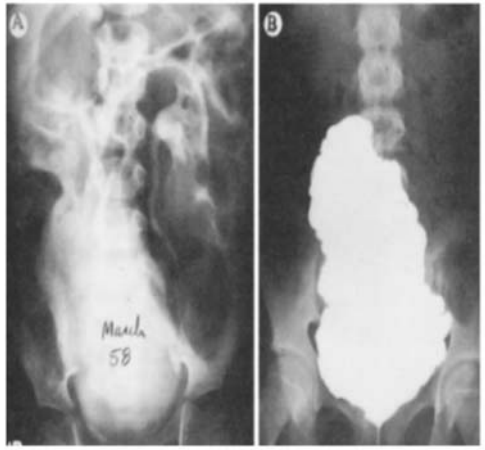
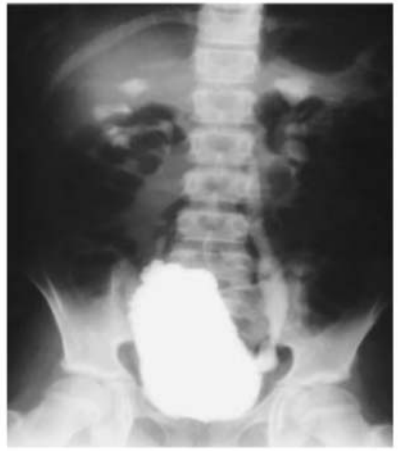


FIG. 2. Excretory urogram in an 11-year-old girl showing a distended thick-walled bladder with dilated upper urinary tracts (From [17] reproduced with permission).



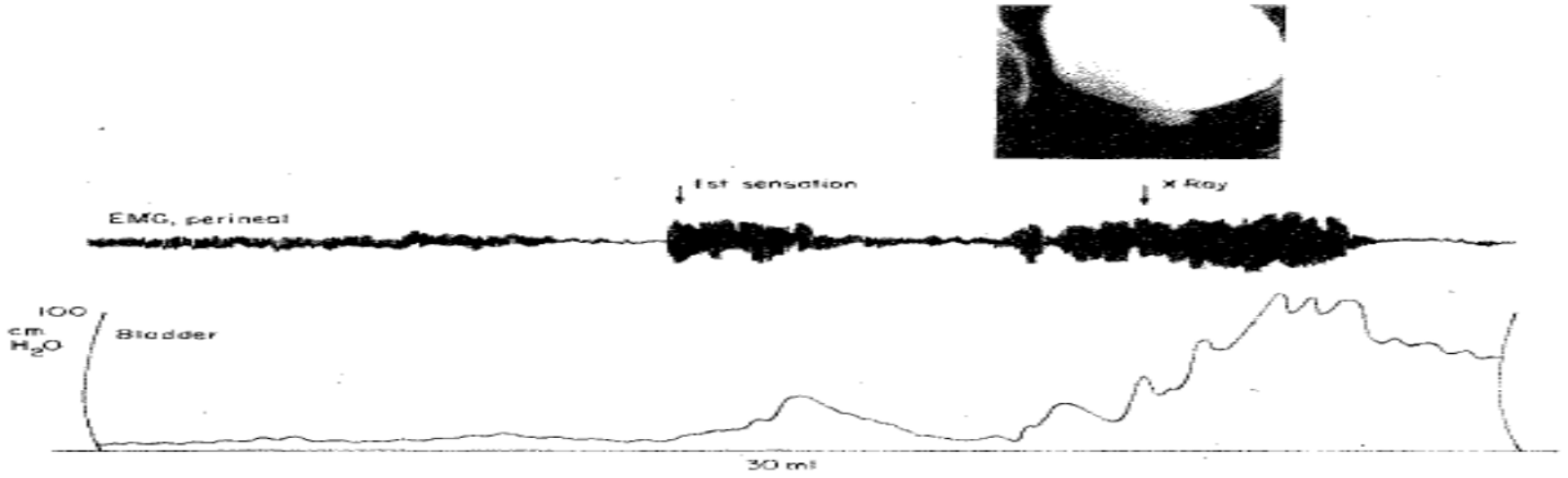
0022-5347/84/1332-0299$02.00/0
THE JOURNAL OF UROLOGY
Copyright © 1984 by The Williams & Wilkins Co.
Vol. 132, August
Printed in U.S.A.

URODYNAMIC STUDIES IN ENURESIS AND THE NONNEUROGENIC NEUROGENIC BLADDER

E. J. McGUIRE AND J. A. SAVASTANO

From the Divisions of Urology, University of Michigan, Ann Arbor, Michigan, and Yale University, New Haven, Connecticut

55 olgu (13 NNNB)



MESANE FONKSİYONUNDAKİ BOZULMALARIN SEBEBİ

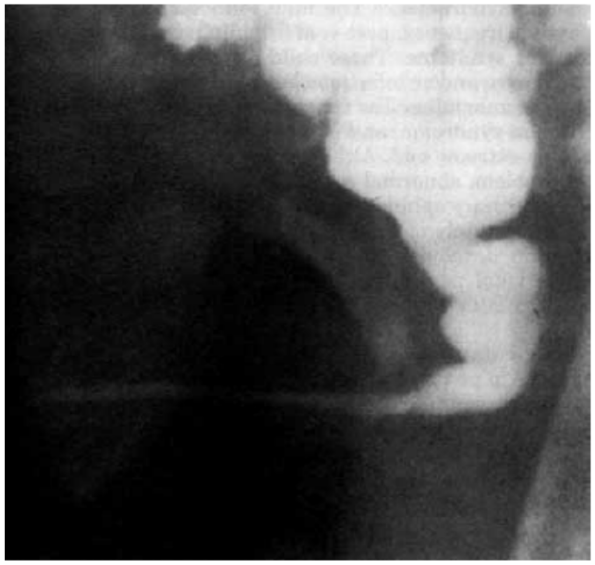
ANİ KONTRAKSİYONLAR

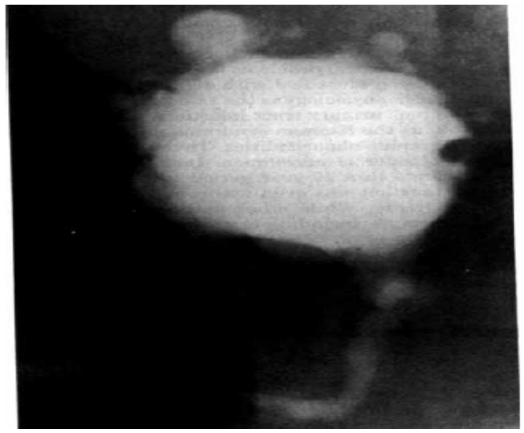
0022-5347/97/1583-1281$03.00/0
THE JOURNAL OF UROLOGY
Vol. 158, 1281–1285, September 1997
Printed in U.S.A.

THE NONNEUROGENIC NEUROGENIC BLADDER OF EARLY INFANCY

V. R. JAYANTHI, A. E. KHOURY, G. A. McLORIE AND S. K. AGARWAL

From the Section of Pediatric Urology, Ohio State University, Columbus, Ohio, and Division of Urology, Hospital for Sick Children, Toronto, Ontario, Canada





- 7 infant vaka
- 3 vaka prenatal tanılı
- Bütün olgulara vezikostomi
  - 3 düzelmiş
  - 3 olgu augmentasyon (2 CRI)
  - 1 olgu TAK

CONCLUSIONS

Our series demonstrates that nonneurogenic neurogenic bladder may be present in the neonatal period, when it is potentially more severe than in more typical older children with the Hinman syndrome. If conservative measures fail, temporary diversion may allow anatomical and neurological pathways to normalize.

0022-5347/98/1603-1019$03.00/0
THE JOURNAL OF UROLOGY

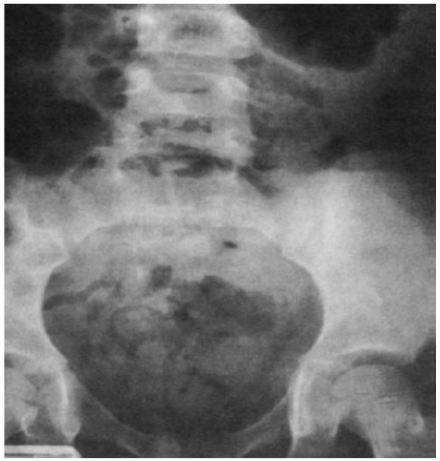
Vol. 160, 1019–1022, September 1998
Printed in U.S.A.

THE RELATIONSHIP AMONG DYSFUNCTIONAL ELIMINATION SYNDROMES, PRIMARY VESICOURETERAL REFLUX AND URINARY TRACT INFECTIONS IN CHILDREN

STEPHEN A. KOFF, THEODORE T. WAGNER AND V. R. JAYANTHI
From the Ohio State University Medical School and Children's Hospital, Columbus, Ohio

TABLE 1. *The most prominent pattern of dysfunctional elimination in 66 of 143 children with primary reflux*

	No. Pts. (%)
Bladder instability	18 (27)
Infrequent voiding	15 (23)
Constipation	33 (50)



DES…….. REFLÜSÜ OLAN BÜTÜN OLGULARDA DEĞERLENDİRİLMELİ

ICSS,2014

The Standardization of Terminology of Lower Urinary Tract Function in Children and Adolescents: Update Report from the Standardization Committee of the International Children's Continence Society

Paul F. Austin,*,† Stuart B. Bauer, Wendy Bower, Janet Chase, Israel Franco,‡ Piet Hoebeke, Søren Rittig, Johan Vande Walle,§ Alexander von Gontard, Anne Wright,|| Stephen S. Yang and Tryggve Nevéus

BLADDER BOWEL DİSFONKSİYONU

↑

HİNMAN BU GRUP İÇİNDE EN AĞIR FORMDUR

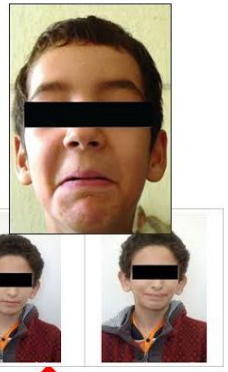
NNNB

DES,BBS

Ochoa (Urofacial) Sendromu

Rekürren UTİ
Mesanenin kötü boşalması
Kazanılmış mesane sfinkter disfonksiyonu
Mesane dekompenzasyonu ve inkontinans
Barsak disfonksiyonu

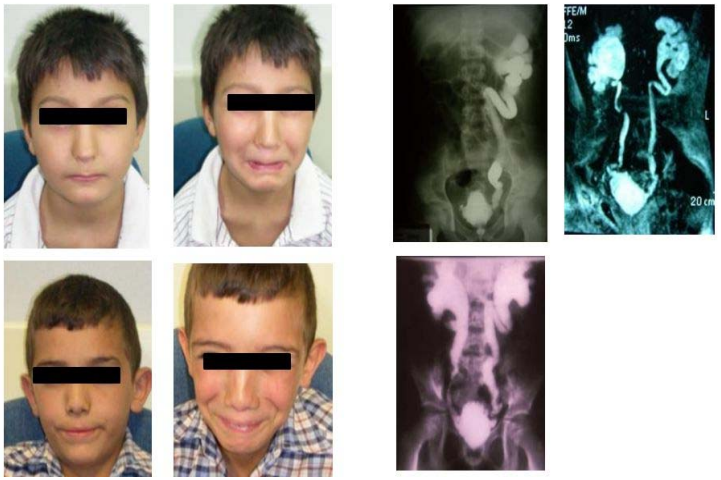
+



Otozomal resesif geçiş (10.kromozom)

Yüz kaslarının ganglionları pontin işeme merkezine yakın yerleşmiştir

Ochoa Syndrome
Urofacial Syndrome



HİNMAN SENDROMU

- ✓ **Aşağı üriner sistemdeki fonksiyon bozukluğunun ağır bir şeklidir**
- ✓ **Mesanede dolma fazında ani kontraksiyonlar enuresise neden olur**
- ✓ **External sfinkterin kontrakte olur, işeme eretelenmeye çalışılır**
- ✓ **Bu aynı zamanda anal sfinkteride etkileyerek barsakta fekal retansiyona neden olur (DES)**

Koff SA, J Urol ,1019,1996
Combs AJ, J Urol,1015, 2013

TANI

- Klinik
- Radyolojik
- Ürodinami

RADYOLOJİ

- USG
- ADBG
- KONTRASTLI KOLON GRAFİFSİ
- SİSTOÜRETROGRAFİ
- MRI

ÜRODİNAMİ

- İdrar kültürü steril olmali
- Sıcaklık 21-37 C , SF
- İnfüzyon hızı beklenen kapasitenin % 10 ml/ dk fazla olmamalı
- İki siklus yapılmalı

AAM-DSD

Basınç-Akım Çalışması rapor

AKKAYA, ZEYNEP

Cinsiyet:	Bayan	Test tarihi:	17.02.2010
Doğum tarihi:	01.01.2003	Hastane:	Erciyes Üniversitesi Tıp Fakültesi Üroloji AD.
Hastane numarası:	1713041	Refere eden:	DR NUMAN BAYDİLLİ

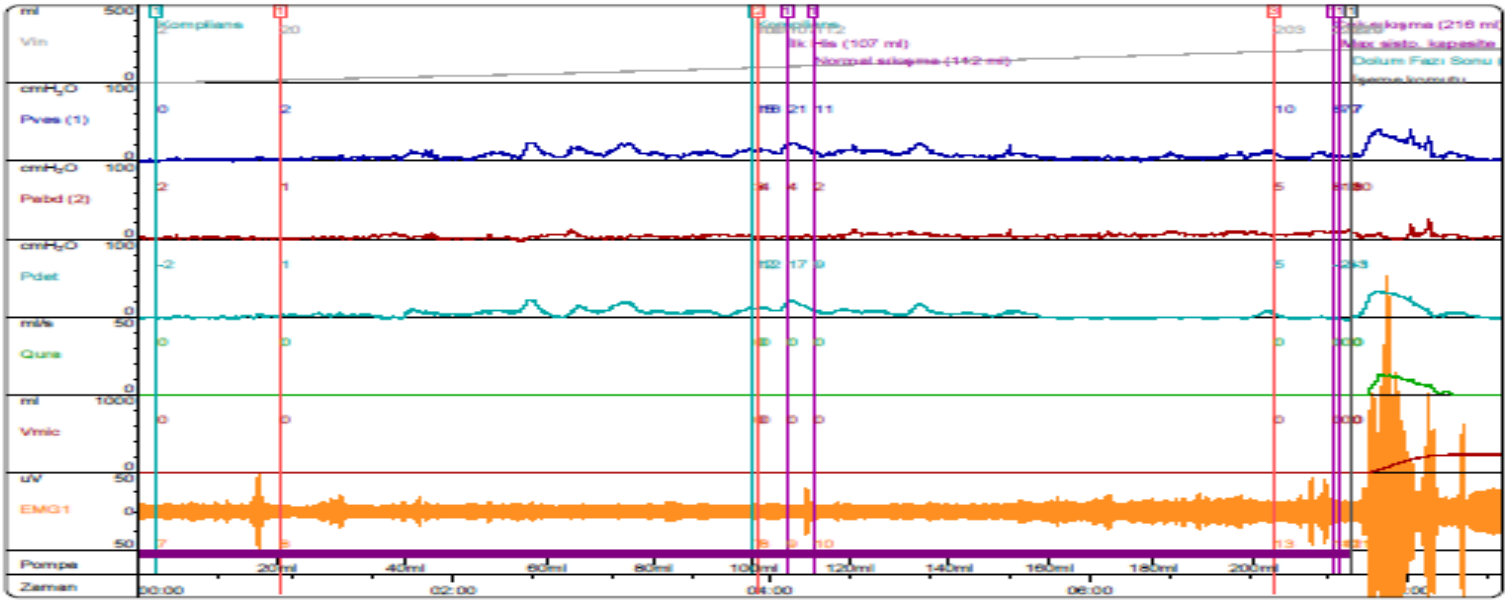
Test notu

Hastanin idrar kesesi 20ml/dk hizla sf ile doldurulmaya baslandi.

- ilk his:80 ml
- normal sikisma:113 ml
- max kapasite:220 ml

Hasta qmax 13ml/sn hızla rezidüsüz olarak işedi.
Ama hastanin detrisör sfinkter disinerjisi bariz olarak gözlendi.....

dr_numan baydilli



AAM + DSD

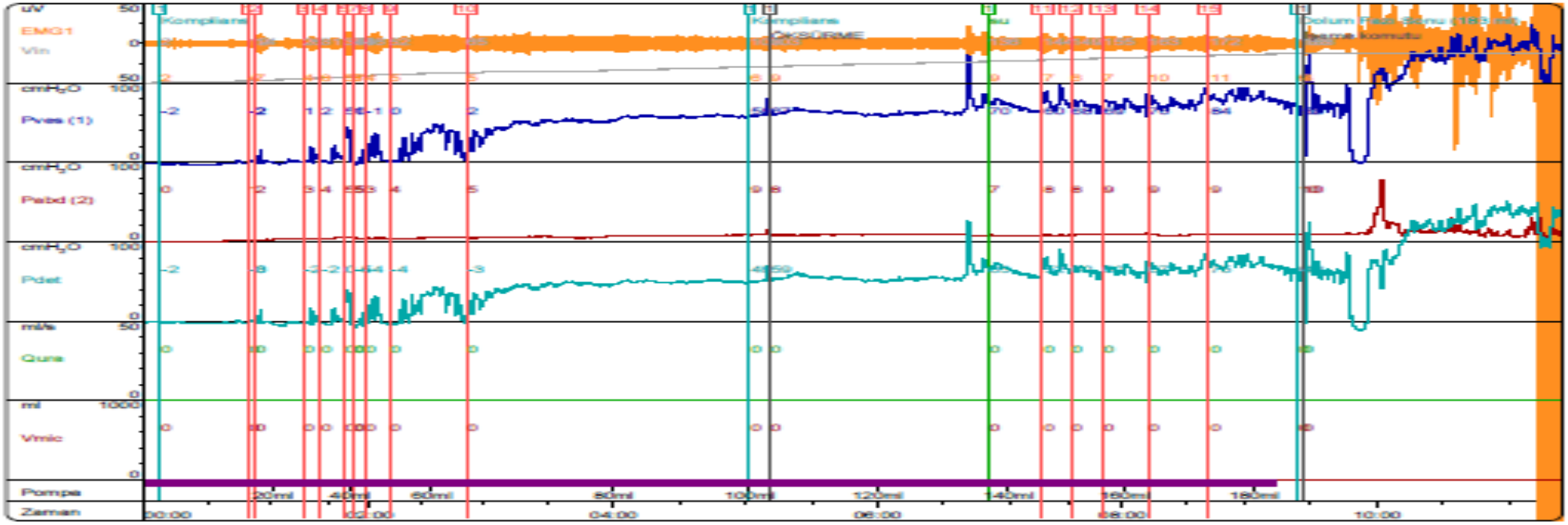
Basınç-Akım Çalışması rapor

bayram, sudenaz

Cinsiyet:	Bayan	Test tarihi:	12.04.2017
Doğum tarihi:	01.01.2015	Hastane:	Erciyes Üniversitesi Tıp Fakültesi Üroloji AD.
Hastane numarası:	1111	Refere eden:	Boş

Test notu

ÜRODİNAMİ RAPORU
SUDENAZ BAYRAM 2.5 YAS KIZ TEL=05496968556
GÜNDE 1 DEFA İDRAR YAPIYOR İDRARINI ZOR YAPIYOR
SEDASYON ANESTEZI ALTINDA 20 ML/DK HIZLA SF ILE MESANE DOLDURULMAYA BAŞLANDI. BELİRGİN DSD AKTİVİTESİ GÖZLENDİ. İŞLEM 180 ML DE SONLANDIRILARAK SUPRAPUBIK SOGUK SU ILE ISEME PROVAKE EDILDI. P DET=143 CM/H2O YA KADAR YÜKSEKLMESİNE RAĞMEN İŞEME OLMADI. KATETERLER ÇIKARILDIKTAN SONRA DA ISEME OLMADI VE SONUNDA NELATON ILE MESANE BOSALTILDI.
PROF.DR.DENİZ DEMİRCİ
ÖGR GÖR DR NUMAN BAYDILLI



DSD ERKEK

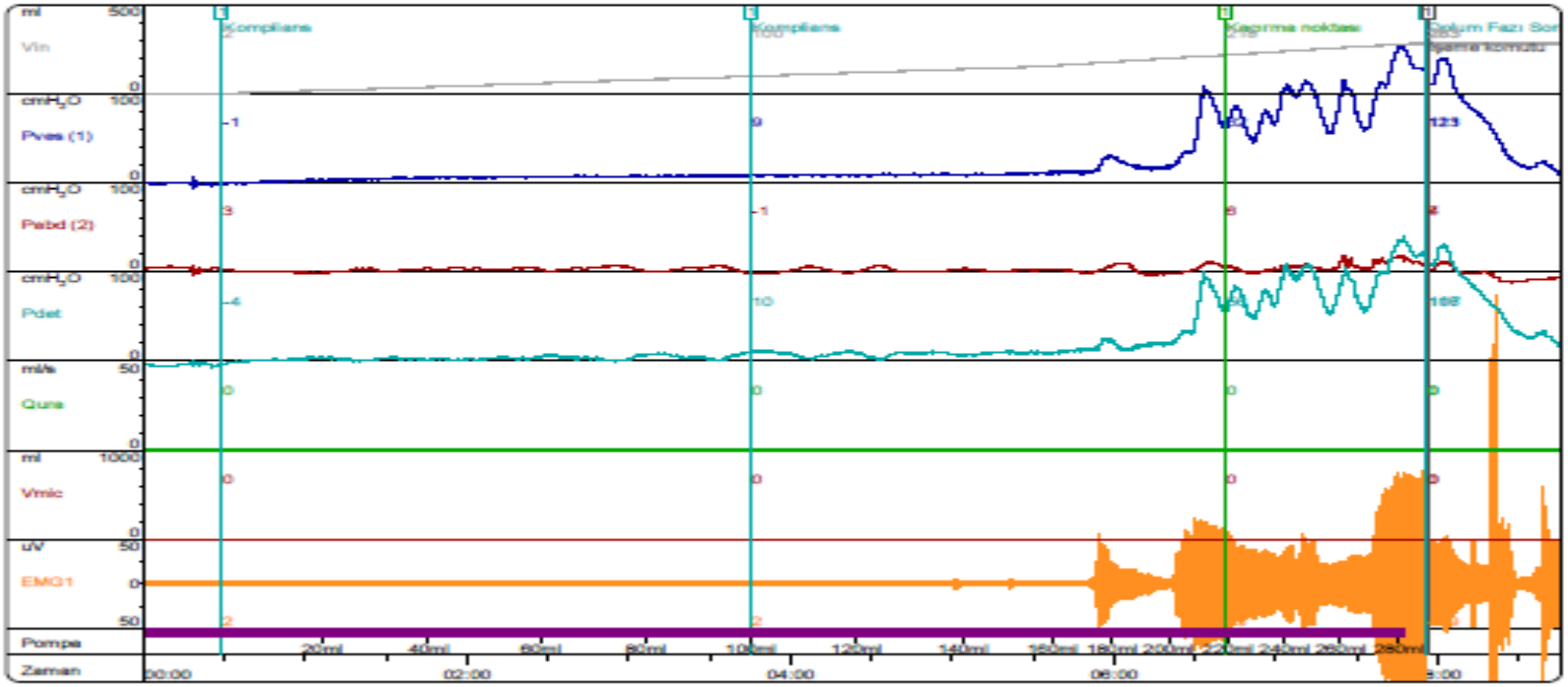
Basınç-Akım Çalışması rapor

ARASLAN, CENGİZHAN

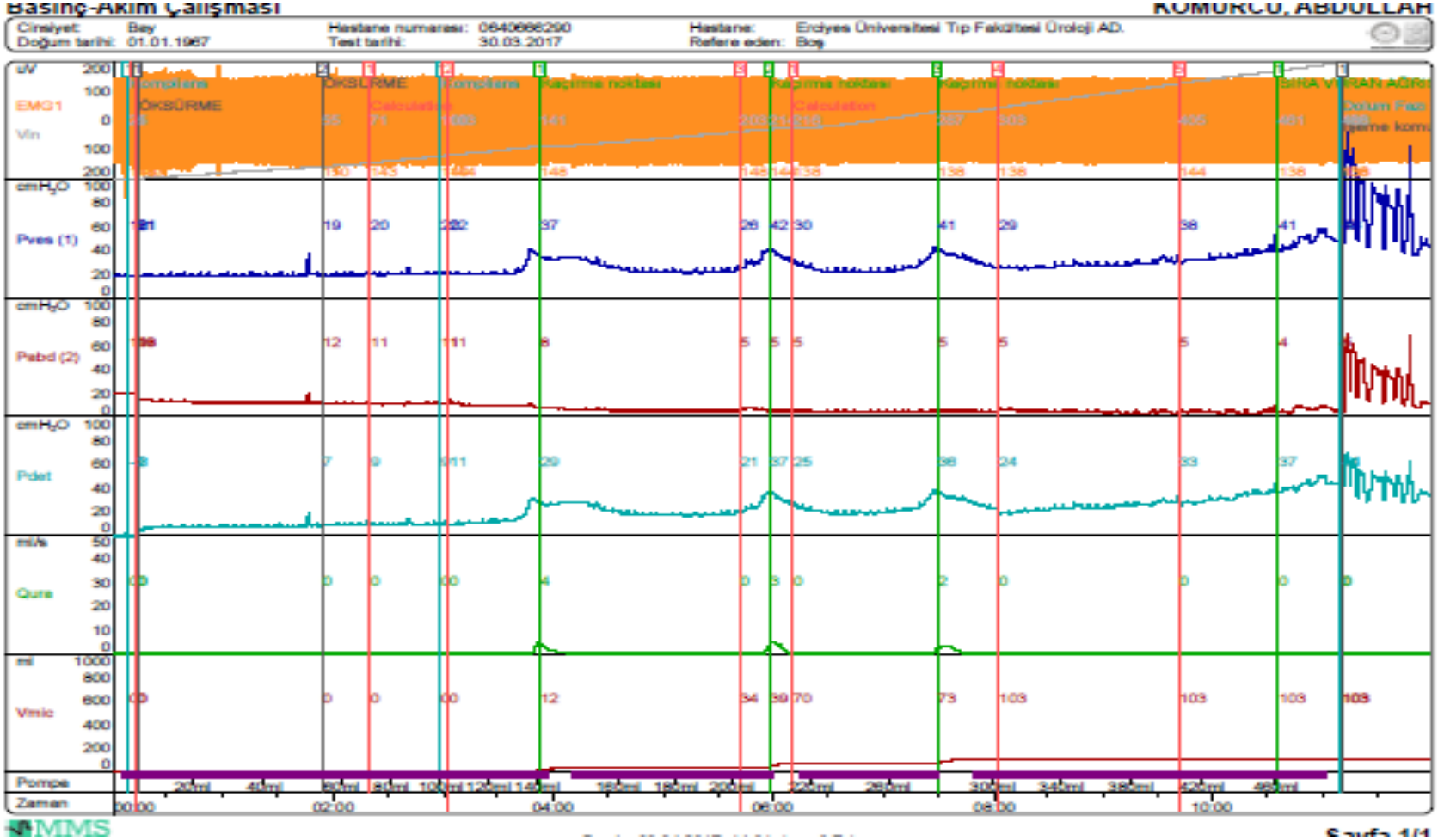
Cinsiyet:	Bay	Test tarihi:	15.12.2008
Doğum tarihi:	01.01.2001	Hastane:	Erciyes Üniversitesi Tıp Fakültesi Üroloji AD.
Hastane numarası:	1112490	Refere eden:	DR EMRE CAN AKINSAL

Test notu

6 F ÜRETRAL KATATERLE 20 ML/DK HIZLA DOLDURULDU. 218 MLDE BIR MIKTAR IDRAR KAÇIRDI 283 ML DE TAMAMEN İŞEDİ



MİYOJENİK HASAR



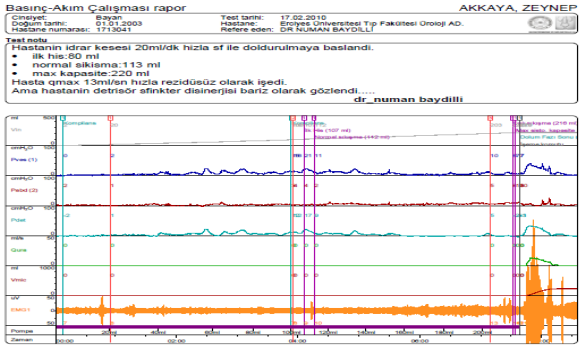
HİNMAN (NNNB)

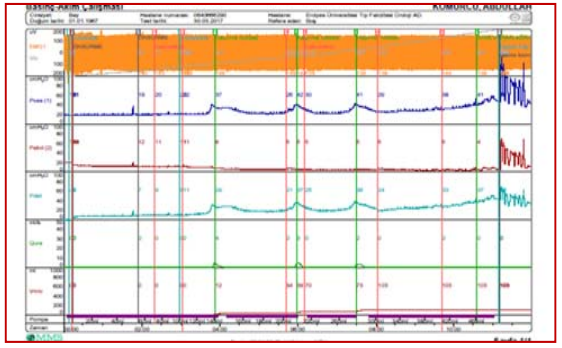
Difonsiyonel eliminasyon sepektrumunun en ağır formudur

-vesikostomi

-mesane ogmentasyonu-mitrofanoff

- renal transplantasyon

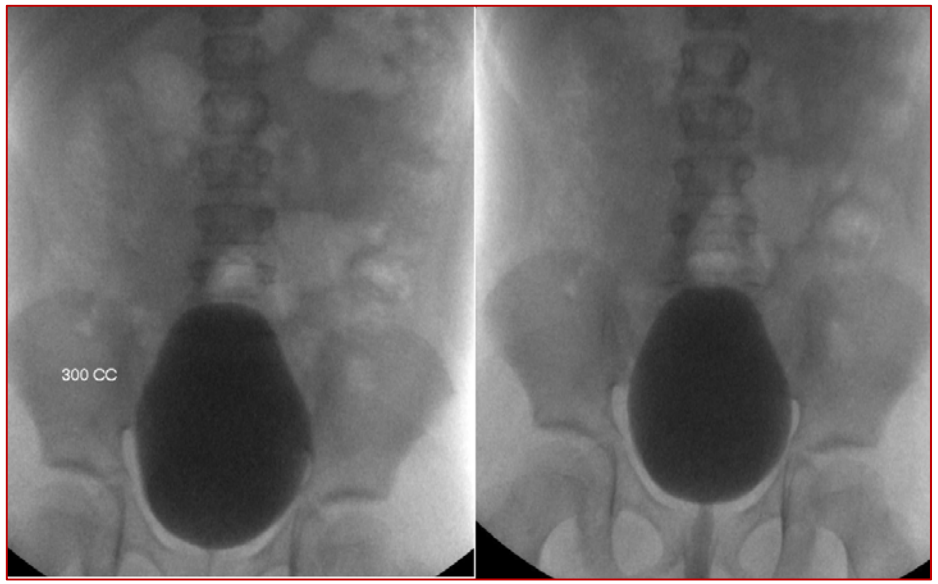


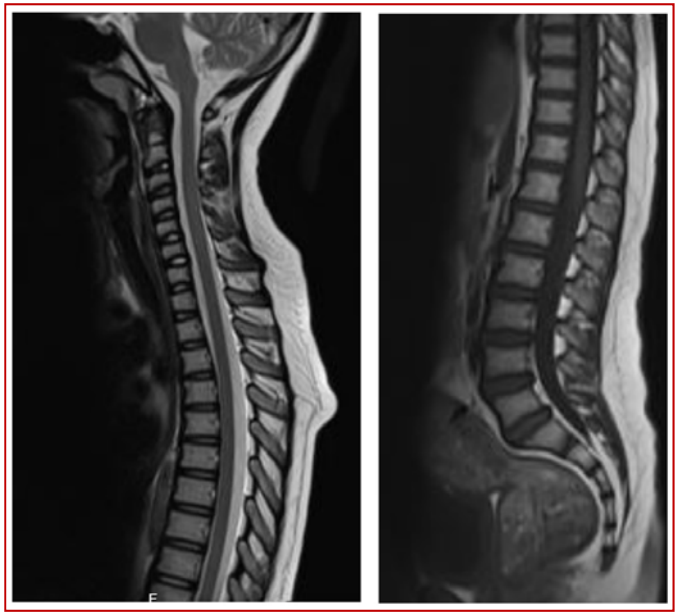


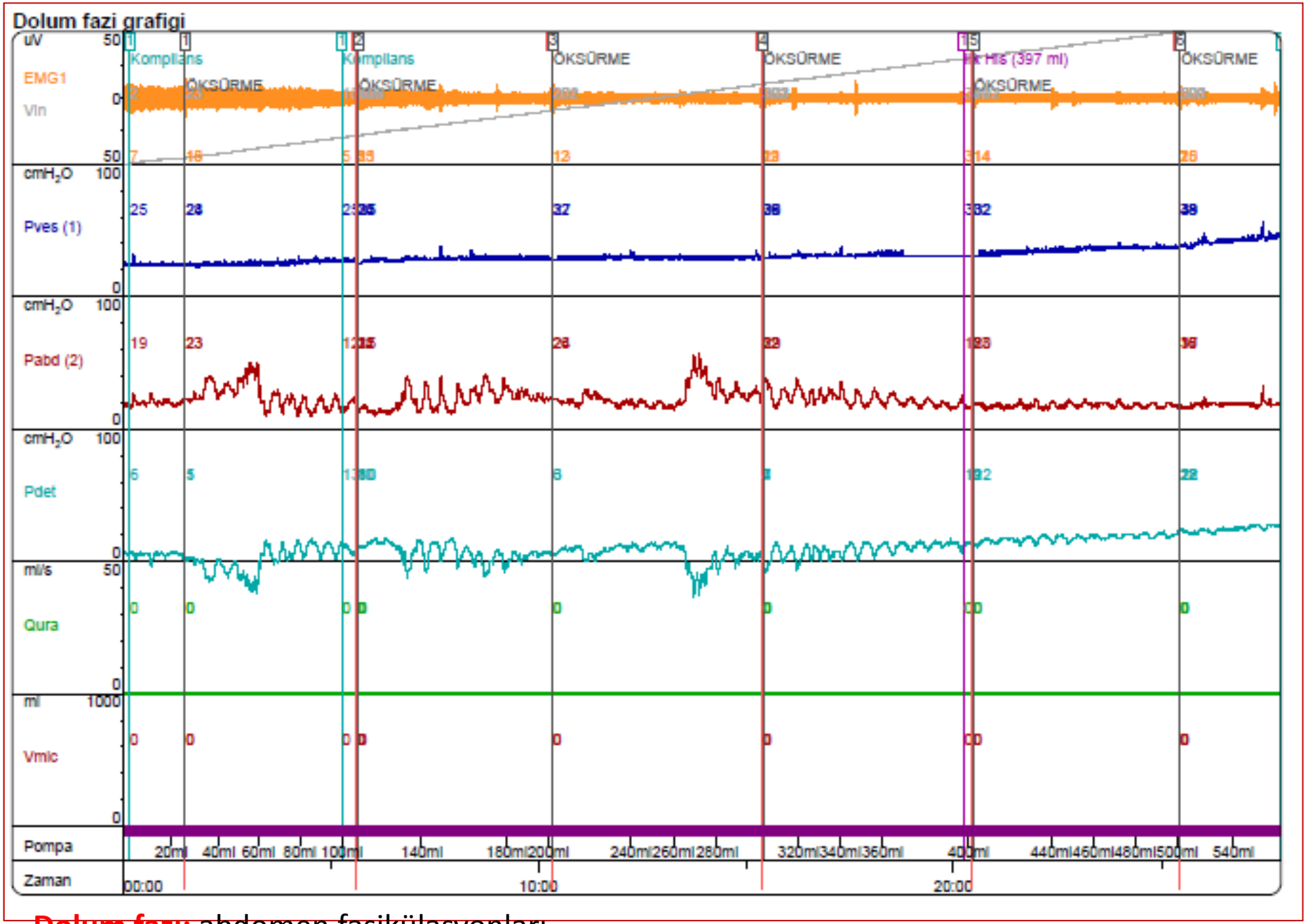
OLGU SUNUMU

- E.Y. 11 yaş, kız
- Şikayet; İdrar kaçırma gündüz haberi olmuyor,
- Hikaye; 5 yaşından itibaren by şikayeti var Antikolinerjik tedv + bioffedback yapılmış. Fayda yok Konstipasyon yok

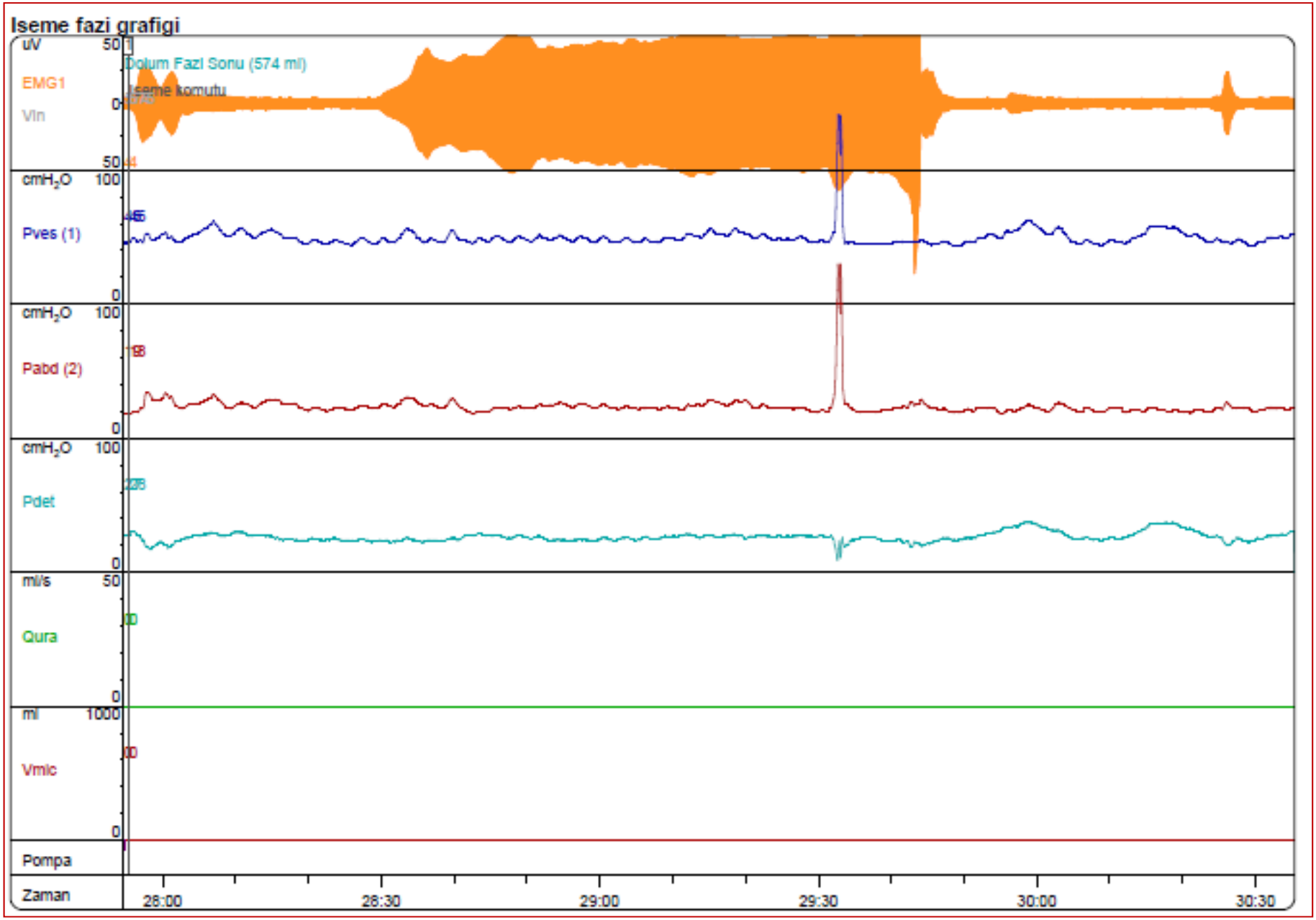
VSUG-MRI 2015





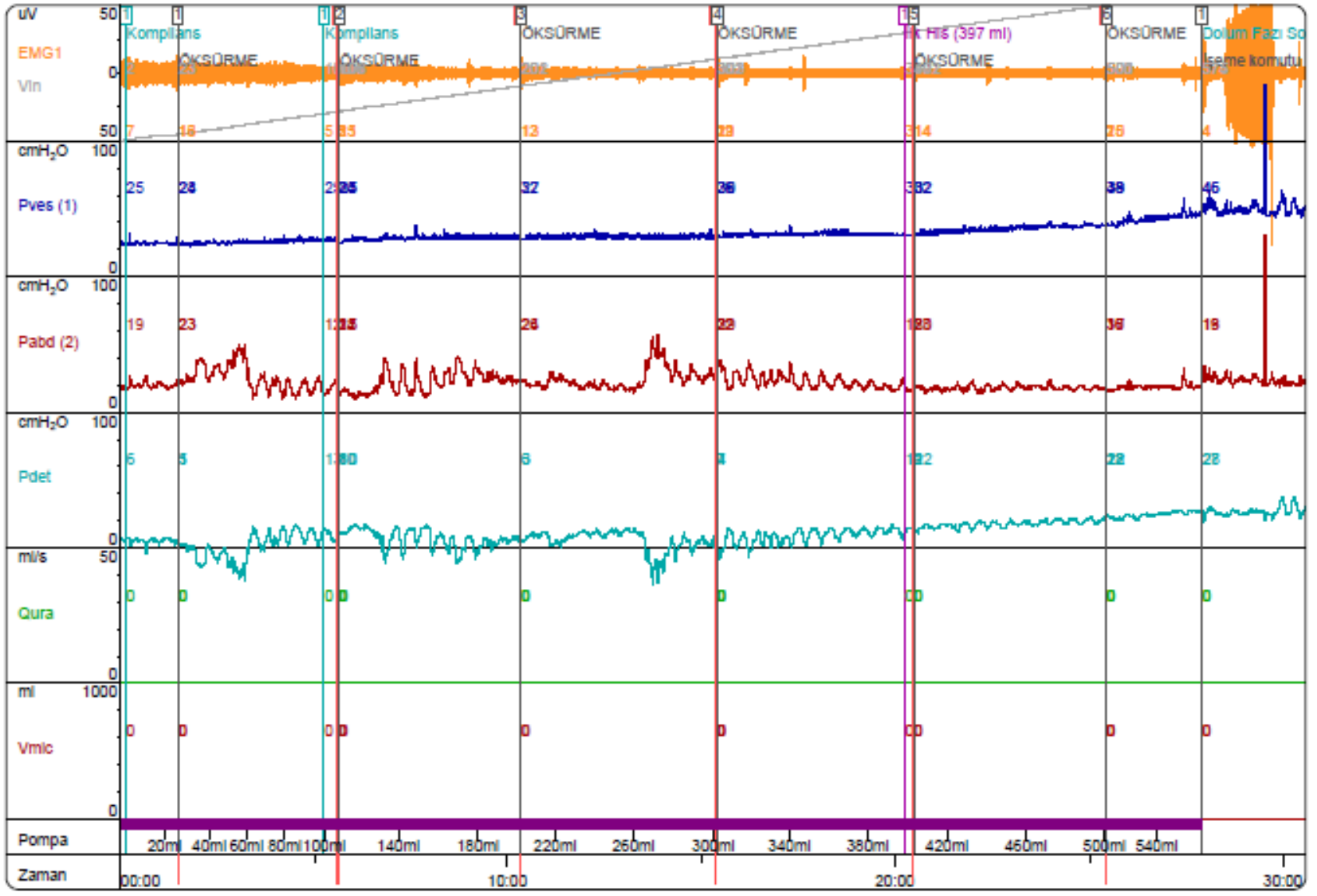


Dolum fazı; abdomen fasikülasyonları



İşeme fazı; EMG aktivitesi

İşeme olmadı, sıkışıklık hissetmedi. Dolum Fazı 574 ml de sonlandırılarak işeme komutu verildi. İdrar yapamayan hastaya serbest üroflow yapıldı. İşeme olmadı.



Dolum hızı= 20ml/dk,
Vücut sıcaklığında serum fizyolojik, uyanık, oryante, oturma pozisyon
İlk His= 397 ml Maksimum dolum= 574 ml


ERCİYES ÜNİVERSİTESİ TIP FAKÜLTESİ
1975
• ÜROLOJİ ANABİLİM DALI •

HİNMAN-TEDAVİ

- Üroterapi
- Farmakoterapi
- TAK
- Biofeedback
- Botolonium toxin enjeksiyonu
- Nöromodulasyon
- Vezikostomi
- Ögmentasyon sistoplasti