HIPERTENSIUNEA RENOVASCULARA

DEFINITIE – **HTA secundara unor leziuni ocluzive ale vascularizatiei renale**

INCIDENTA

- **0,65 – 5% din bolnavii cu HTA (incidenmta reala 20% ???)**
- **1/3 din HTA maligna sau accelerata**
- **> 20% din cazurile de HTA rezistenta**
- **mai frecvent < 30 ani, >60 ani**

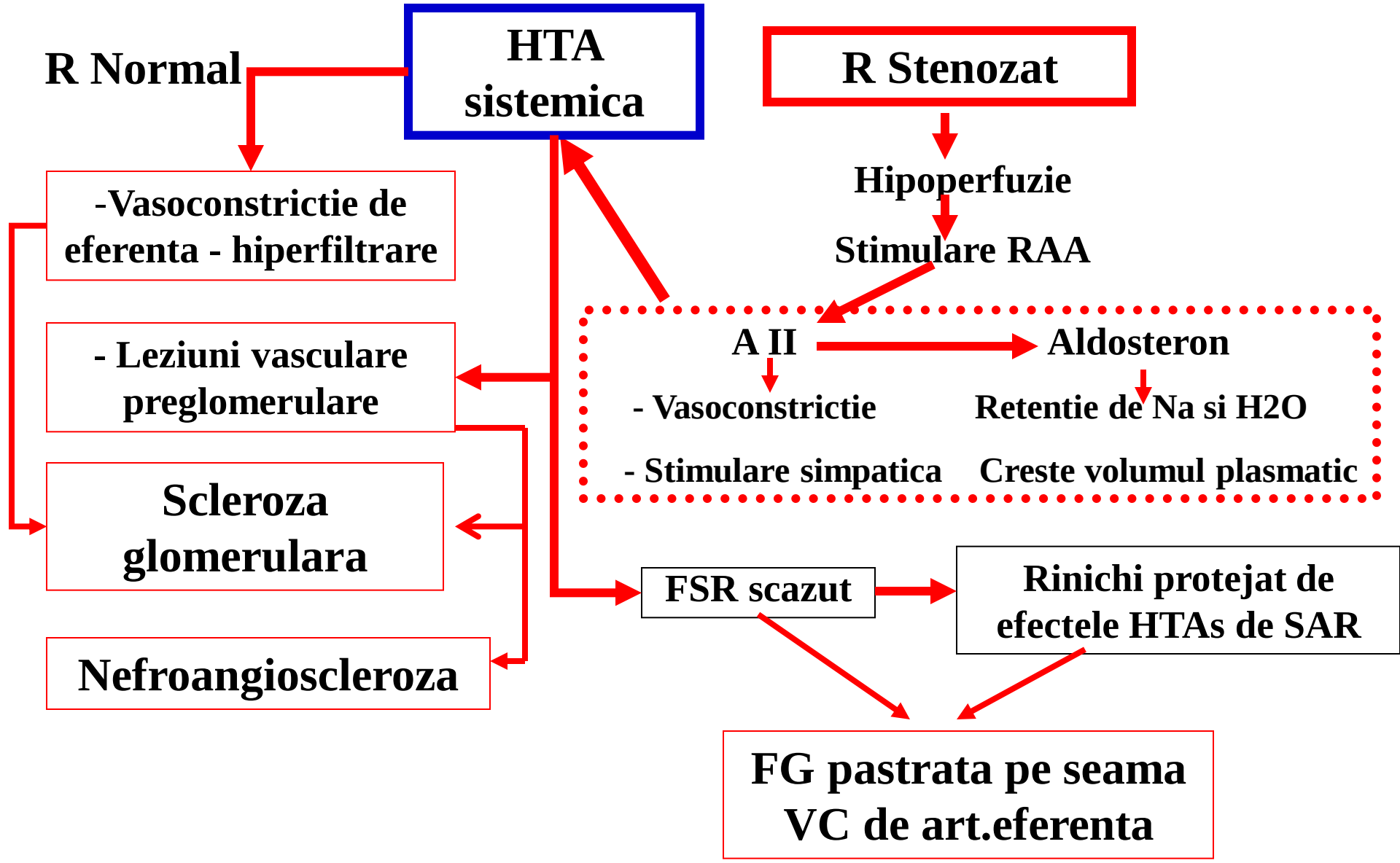
ETIOLOGIE

A Leziuni vasculare intrinseci

1. **HRV aterosclerotica – domina varsta > 60 ani**
   - **Obstructia prin placa de aterom a AR**
   - **Se asociaza cu ateromatoza aortei**
   - **Are caracter progresiv**
2. **HRV prin displazie fibromusculara – tineri**
   - **28% leziuni bilaterale**
3. **HRV de cauze diverse**
   - **Iradierea vaselor renale**
   - **Artrite: Takayashu, PAN, SD, LES**
   - **Tromboza-embolia arterei renale**
   - **Leziuni, compresiuni: chiste renale, transplant renal, leziuni dupa litotritie, neurofibromatoza, etc**

B Leziuni vasculare extrinseci

PATOGENIE



initial

TABLOU CLINIC

DEBUT – brusc (HTA cu durata < 1an) – sub 35 ani sau peste 50 ani

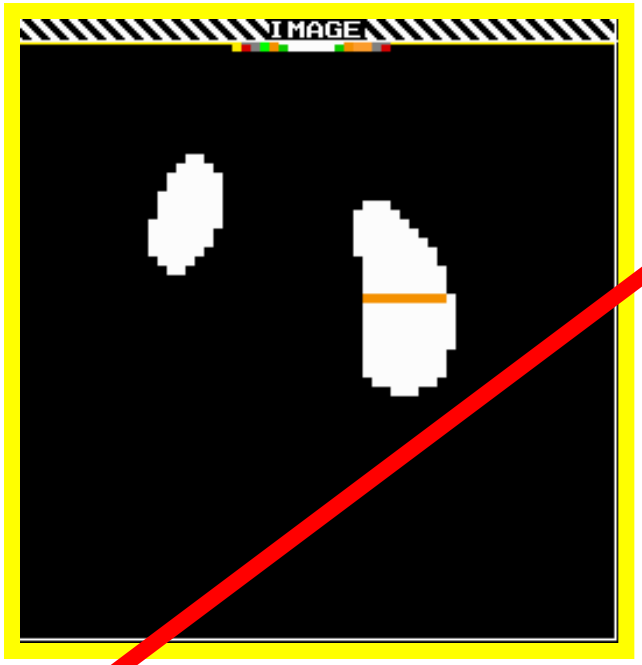
- **SEX – tineri – femei >barbati, varstnici – barbati > femei**
- **MANIFESTARI CLINICE**
  - **HTA medie sau severa – cu semnele clinice aferente**
  - **Visceralizarea HTA – cord – HVS, IVS**
    - retina – retinopatie hipertensiva gr. III – IV
    - rinichi – nicturie +/- retentie azotata
  - **Suflu sistolic paraombilical**
  - **+/- Semne clinice de hipo K emie – astenie musculara, tetanie, poliurie**
  - **Simptome de ateroscleroza sistemica**
  - **Flush EPA**
- **LABORATOR**
  - **hipo K-emie – 17% din cazuri**
  - **retentie azotata**
  - **proteinurie – uzual < 05g/24h – rareori > 3,5g/24h**
  - **FPR – cu alterare progresiva**

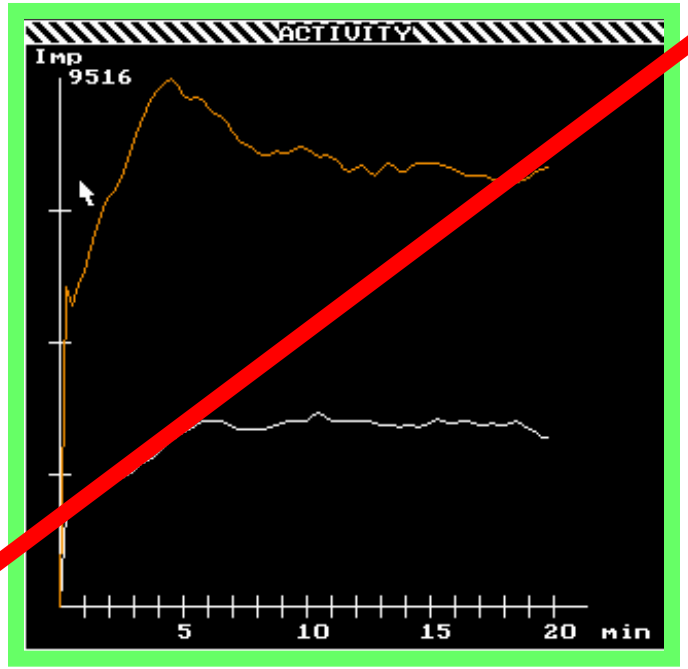
TESTE DE DIAGNOSTIC IN HT-RV

- **ECOGRAFIA RENALA – rinichi mic unilateral cu suprafata regulata**
- **UROGRAFIA INTRAVENOASA**
  - **rinichi cu > 1,5cm mai mic decat cel cotralateral, suprafata regulata**
  - **intarzierea secretiei pe rinichiul mai mic**
  - **persistenta imaginii > decat pe rinichiul normal**
- **ARP – crescuta (semnificatie 75%)**
  - **Testul la Captopril – se administreaza 25 mg Captopril**
    - **se masoara TA initial si la 1h dupa administrare**
    - **serecolteaza ARP inainte si dupa administrare**
    - **SAR – TA scade cu 18mmHg**
      - **ARP creste**
- **NEFROGRAMA IZOTOPICA cu Hipuran marcat**

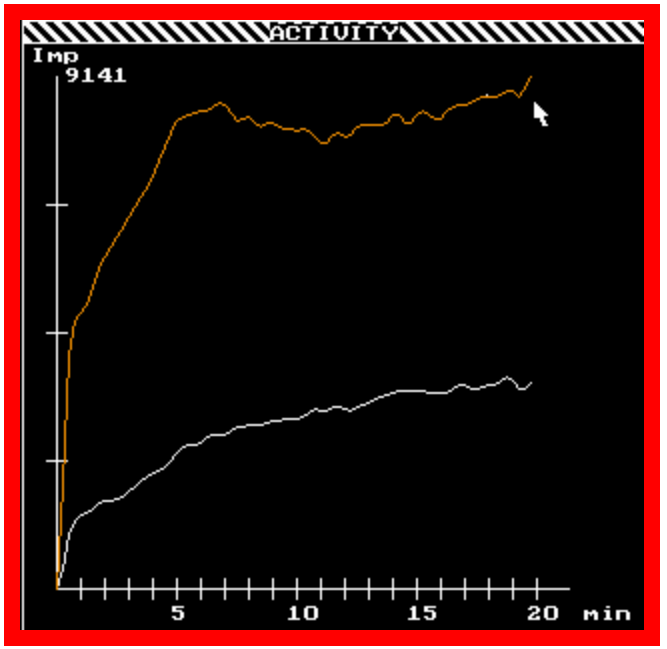
NEFROGRAMA IZOTOPICA

Standard



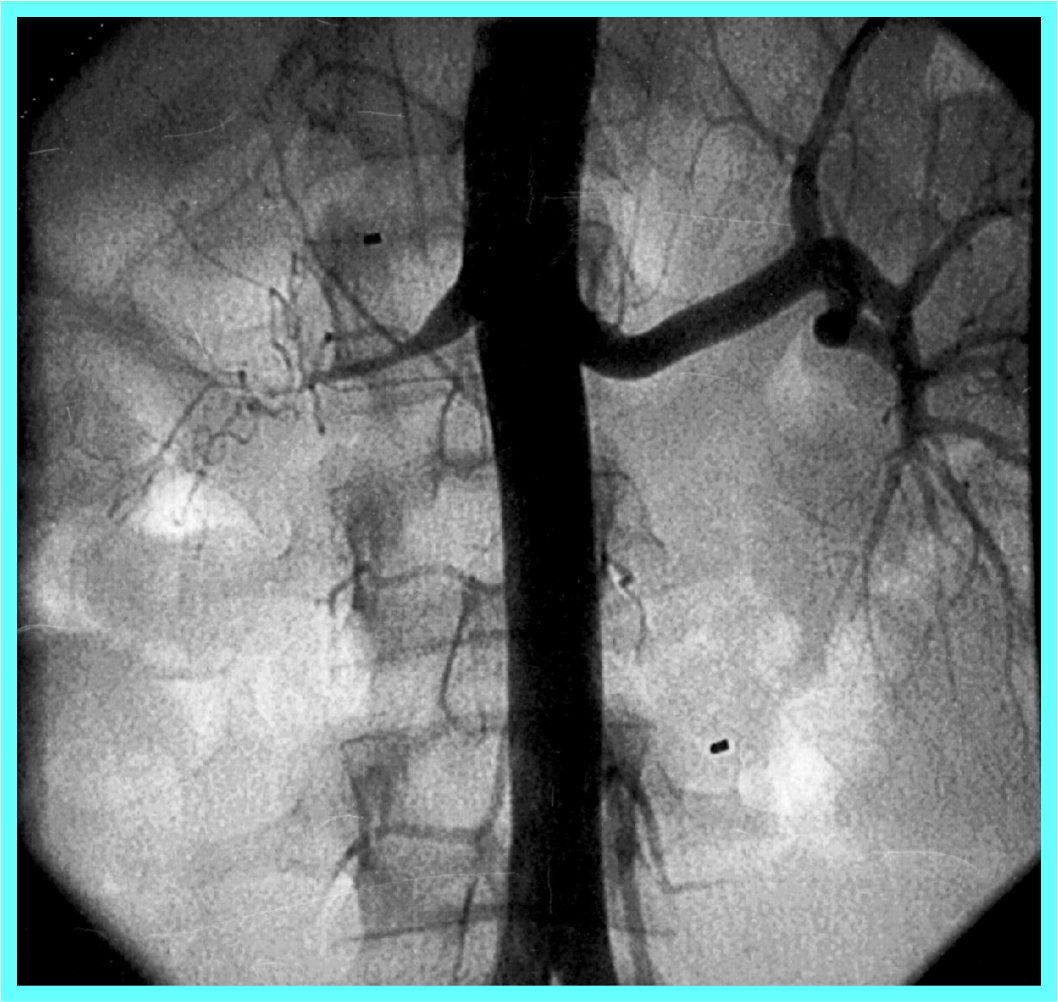


Test la Captopril



• **ARTERIOGRAFIA RENALA**

- evidentiaza stenoza si precizeaza localizarea si severitatea stenozei



DIAGNOSTIC POZITIV

HTA →

- **Debut <30 ani sau > 50 ani**
- **Debut acut sau recent sau accentuare brusca a severitatii**
- **Rezistenta**
- **+/- suflu sistolic paraombilical**
- **Rinichi mic unilateral cu suprafata +/- regulata sau mici bilateral inegal**

↓

ECO + Doppler CD

Gold standard pentru screening → **Debit scazut, velocitate crescuta**

↓

ANGIO CT → **Confirmare**

DIAGNOSTIC DIFERENTIAL

- **PNC forma hipertensiva – rinichi mic unilateral contur neregulat**
- **GNC**

FORME CLINICE

- **HTA RV DE ORIGINE ATEROSCLEROTICA**
  - **> 60% din HTA RV, varsta > 50 de ani, prezenta factorilor de risc aterogen si a altor localizari a aterosclerozei**
  - **Leziunile au tendinta la progresiune in 50% din cazuri**
- **HTA RV PRIN DISPLAZIE FIBROMUSCULARA**
  - **30% din bolnavii cu HTA RV, varsta < 30 ani, absenta factorilor de risc aterogen, F>B**
  - **60% din cazuri sunt bilaterale**
  - **uzual leziunile nu progreseaza**
- **HTA RV POSTTRAUMATICA**
  - **dupa accidente de circulatie, indus de hematom perirenal**

- **HTA PRIN EMBOLIE ARTERIALA**
  - **prezenta unei boli embolizante**
  - **clinic: durere lombara colicativa + hematurie + HTA**
- **HTA RV BILATERALA**
  - **28% din HTA RV**
  - **retentie azotata indusa de administrarea IEC sau BRA**
  - **leziunile renale de regula sunt asimetrice dar rinichii sunt mici bilateral**
- **HTA RV DUPA TRANSPLANT RENAL**
- **HTA RV CU PTOZA RENALA**

COMPLICATII

- **Cardiovasculare : insuficienta cardiaca, tulburari de ritm**
- **Cerebrale : accident vascular cerebral**
- **Renale : insuficienta renala cronica, acuta**

PROGNOSTIC

- **HTA RV netratat – prognostic rezervat**
- **HTA RV bilateral sau insotit de IRC – prognostic rezervat**
- **Dependent de**
    - **Conseccintele si importanta visceralizarii HTA**
    - **Succesul terapeutic**

TRATAMENT

- strategie -

HTA RV

Hipotensoare pana la diagnostic sau decizie terapeutica

– NU IEC sau BLOCANTI A II

< 60 ani

Risc crescut

Risc acceptabil

Trat consrervator

TA controlata
Functie renala
stabila

NU

DE URMARIT

> 60 ani

Trat consrervator

TA controlata
Functie renala
stabila

NU

DE URMARIT

PTA

Succes

Esec

Chirurgical

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

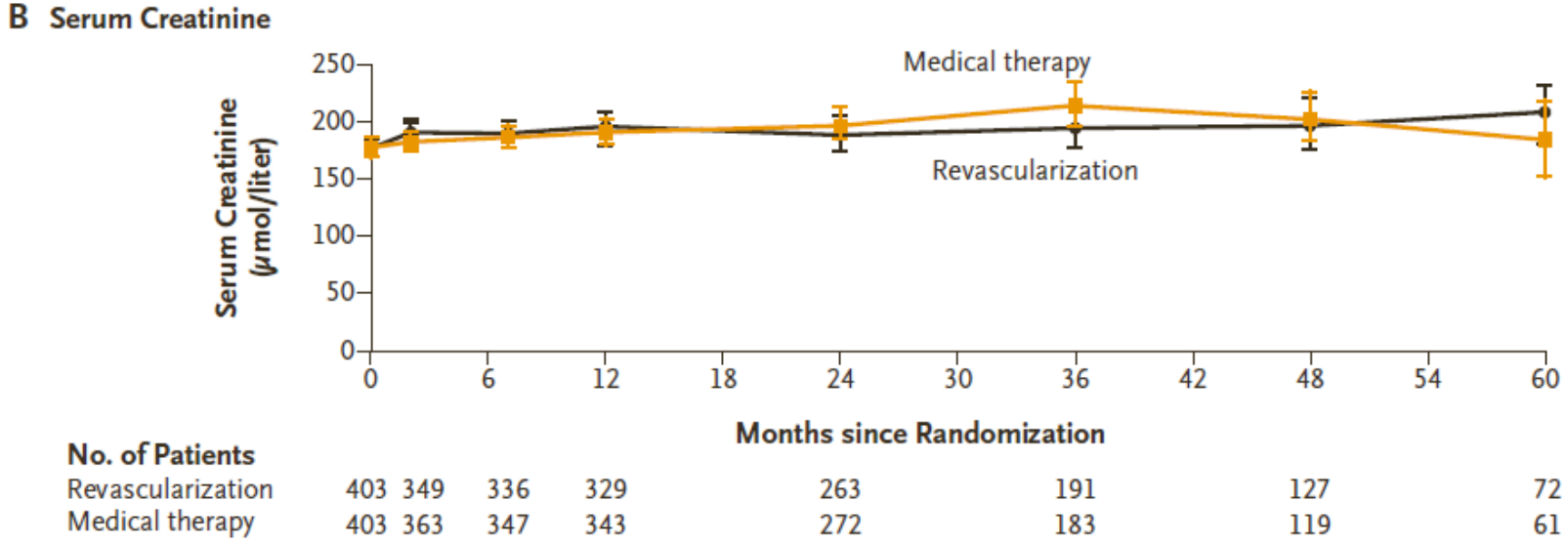
Revascularization versus Medical Therapy for Renal-Artery Stenosis

The ASTRAL Investigators

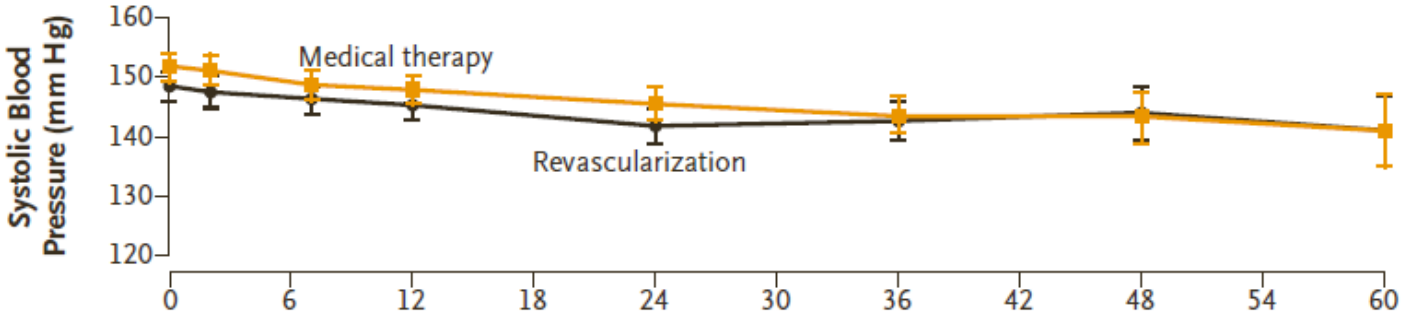
N Engl J Med 2009; 361:1953-1962 | November 12, 2009 | DOI: 10.1056/NEJMoa0905368

ASTRAL The Angioplasty and Stenting for Renal Artery Lesions

806 bolnavi SAR aterosclerotica – 5 ani FU

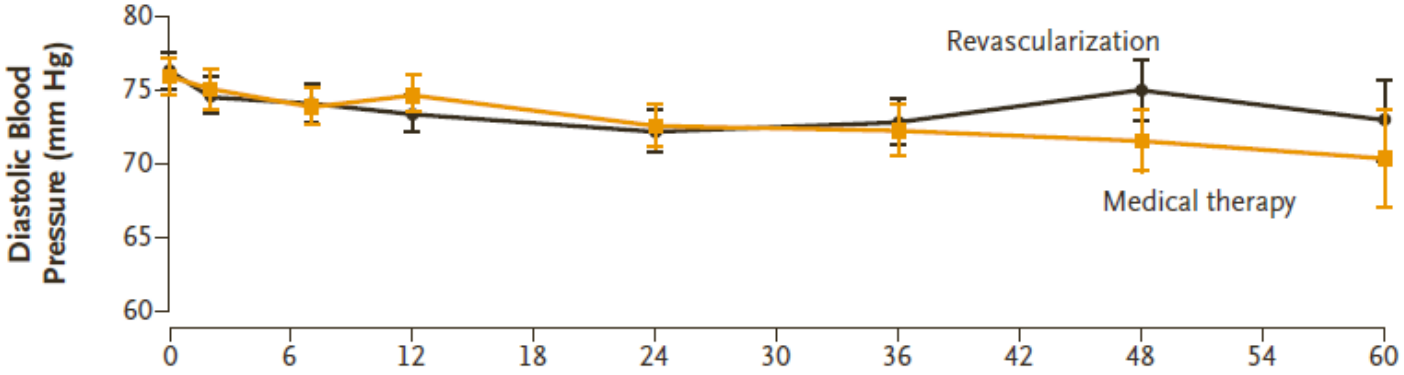


A Systolic Blood Pressure



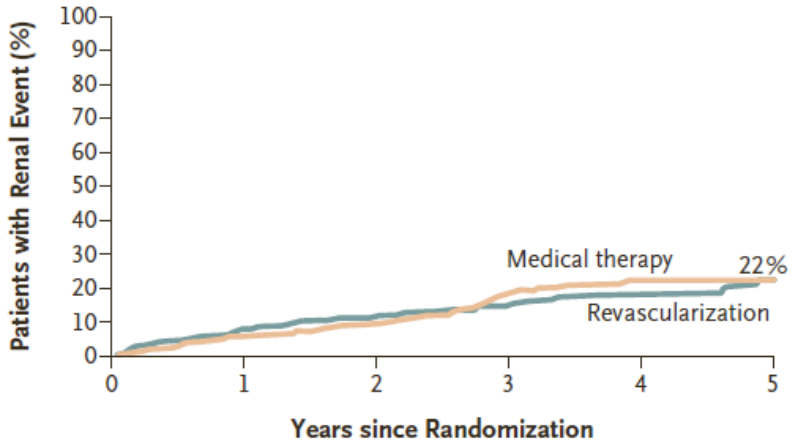
Number of Patients								
Revascularization	385	346	332	321	257	197	125	71
Medical therapy	388	361	350	336	264	178	124	62

B Diastolic Blood Pressure



Number of Patients								
Revascularization	384	344	330	320	256	197	125	70
Medical therapy	388	361	349	335	262	178	123	63

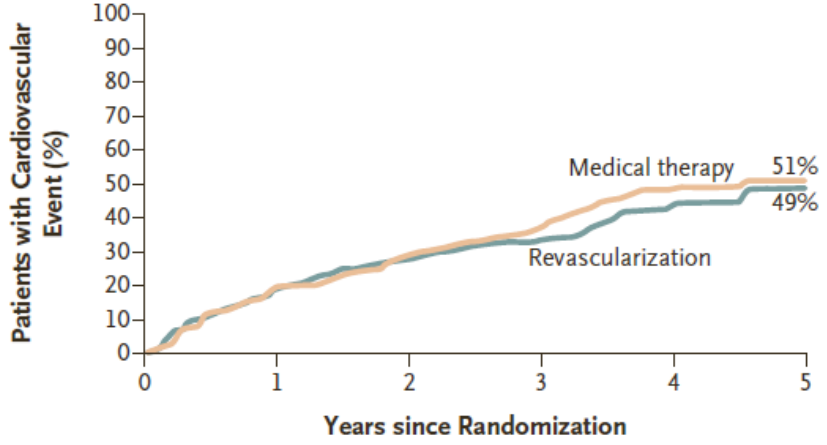
A First Renal Event



No. at Risk

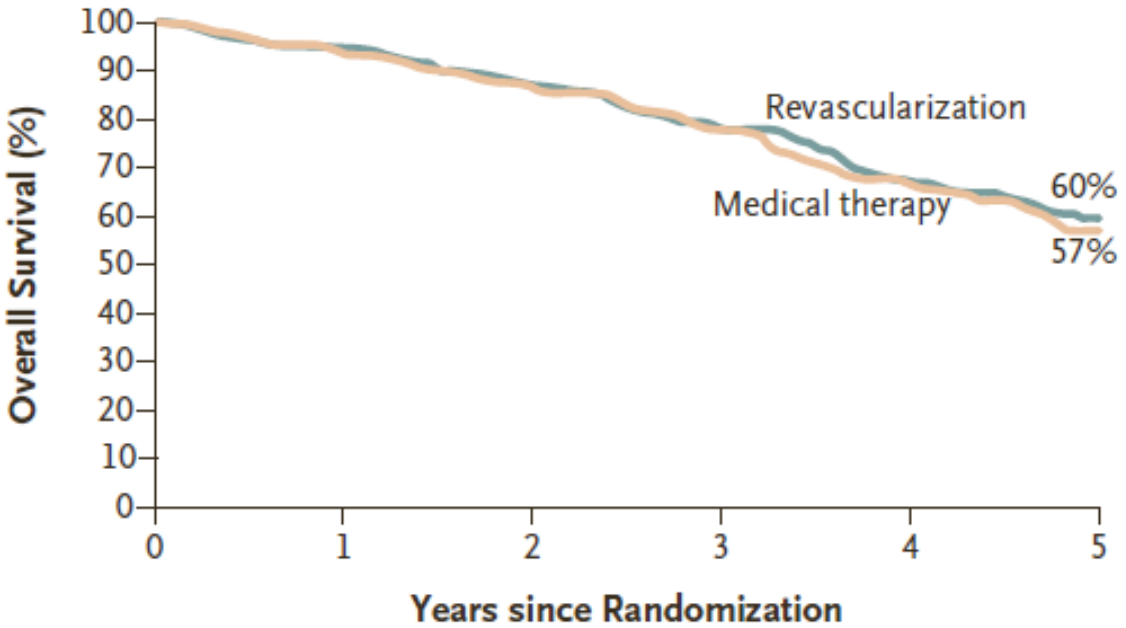
Revascularization	403	315	236	157	99	39
Medical therapy	403	319	233	145	84	37

B First Cardiovascular Event



No. at Risk

Revascularization	403	278	200	133	77	33
Medical therapy	403	286	194	118	61	27



No. at Risk

Revascularization	403	337	257	178	109	46
Medical therapy	403	332	248	165	96	40

Figure 4. Kaplan–Meier Curves for Overall Survival.

ASTRAL

Tratamentul HTA – IEC sau BRA

Se stenteaza

- **Cazurile cu EPA repetate**
- **Cazurile cu crestere progresiva a creatininei ser**

SAR dr. – revascularizatie dupa PTA