

Oh What A Beautiful



MORNING

**It's TURKEY calling!!!**

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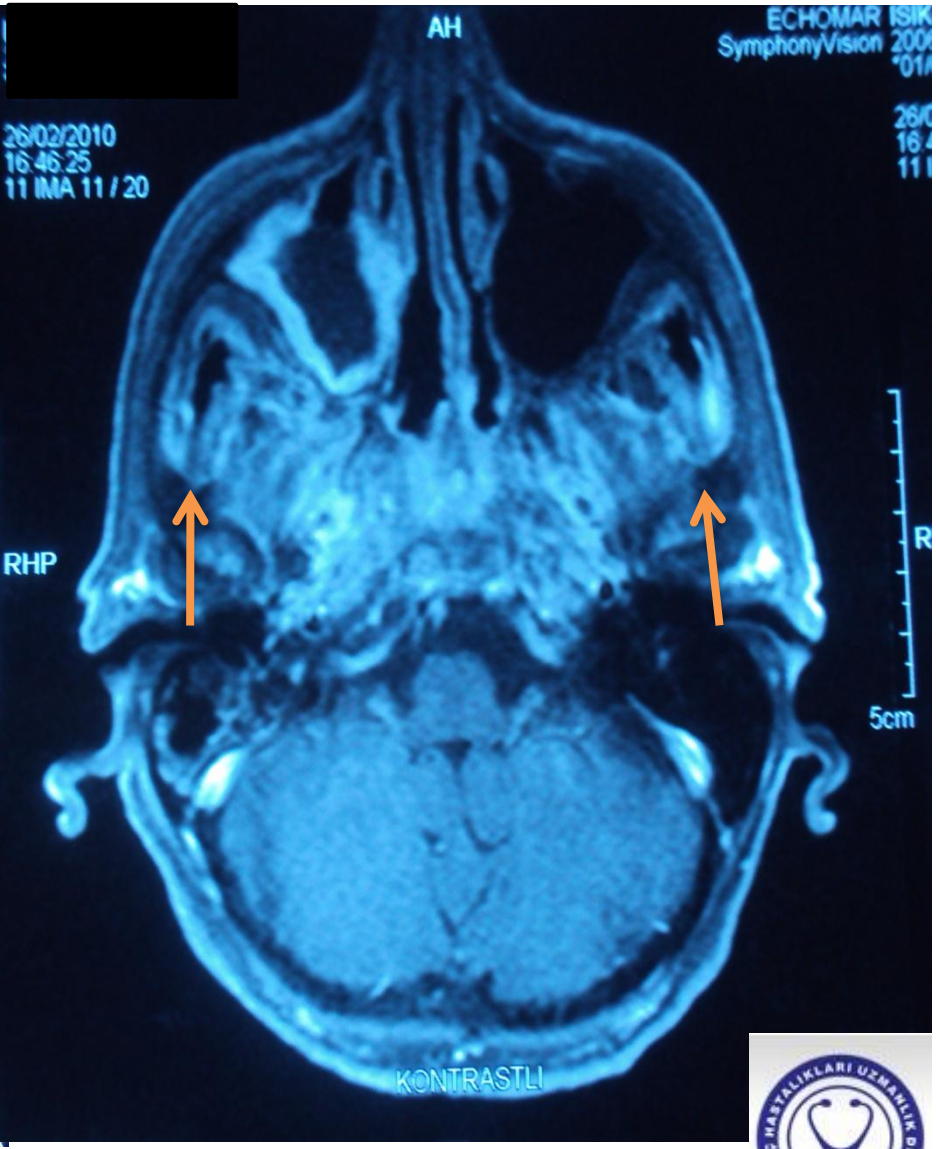
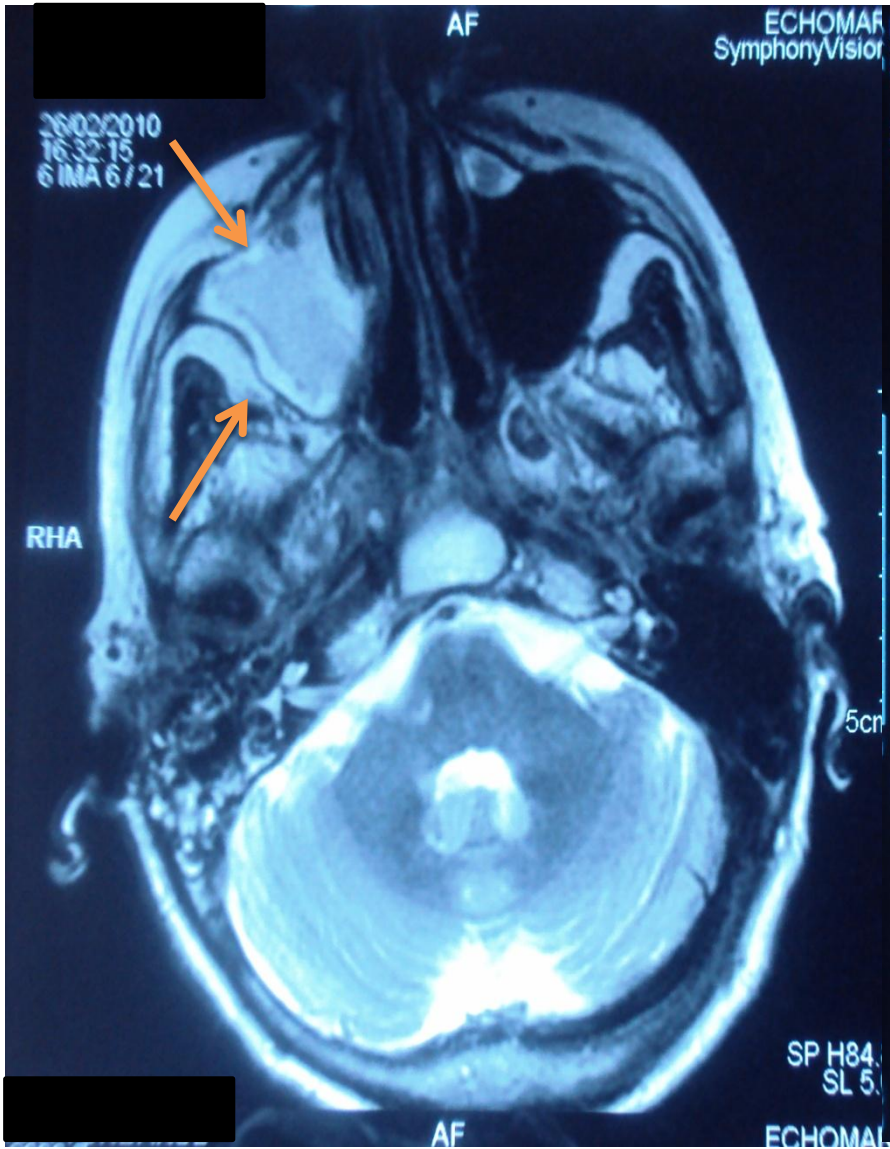
- 65 y.o woman
- Admitted to our clinic;
  - Fever
  - Fatigue
- Dec 09 → Rhinitis, sneezing → Cefuroxim axetil
- Jan 10 → Similiar symptoms → Antihistaminic and decongestant
- Feb 10 → Earache → Amoxicilin/clavulonat and parasetamol



- Februray 10 → Servical MRI → Mastoiditis, otitis, chronic sinusitis, right sublingual gland expansion
- March 10 → Fatigue (first treated with moxifloksasin, after gemiofloxasin)
- March 10 → Fever; Paranasal CT → maxiller, sfenoidal, posterior ethmoidal sinusitis







- MH: Hypertension  
Gastrointestinal Bleeding,  
MVP, Atrial Septal Aneurysm
- FH: Hypertension, Hyperlipidemia - Sister  
IHD -Mother



# Physical Examination

- Pale
- 130/70 mmHg, HR: 80/min
- Upper eyelid xanthelasma, lipemia retinalis.
- Peripheral edema
- Systems otherwise normal.



# Laboratory

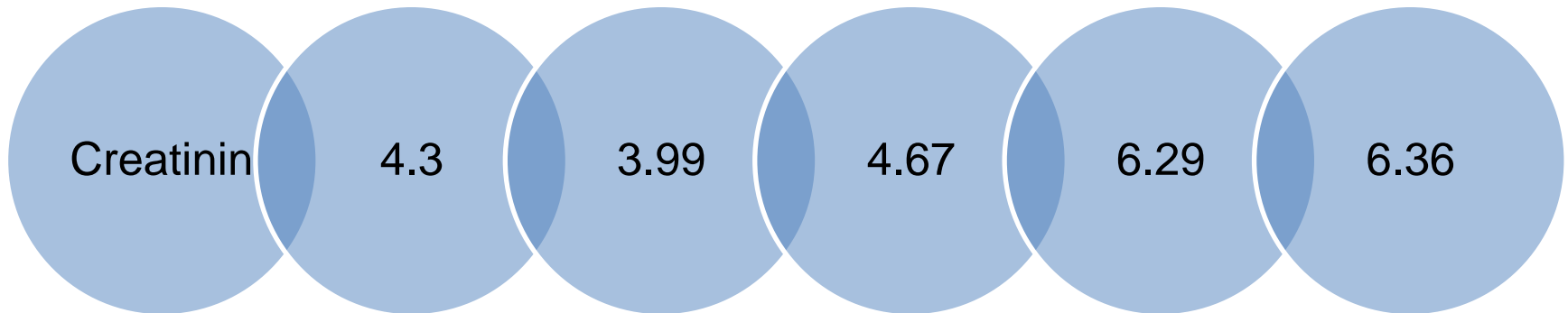
- Hb: 9.5 (12-16 g/dl)
  - Hct: 27.6 (%36-46)
  - WBC: 18660 (4800-10800/mm<sup>3</sup>)
  - PLT: 278.000 (278000/mm<sup>3</sup>)
  - BUN: 70.5 (6-19 mg/dl)
  - Crea: 4.33 (0.5-0.9 mg/dl)
  - ALT: 19 (<32 U/l)
  - AST: 18 (<31U/l)
  - ESR: 100 (1-20 mm/hour)
  - CRP:20.29 (0-0.5 mg/dl)
  - Na: 135.7 (136-145 mEq/l)
  - K: 4.49 (3.3-5.1 mEq/l)
  - Ca:7.91 (8.8-10.2 mg/dl)
  - ALP: 60 (35-104 U/l)
  - GGT: 20 (<55 U/l)
  - TSH: 2.42 (0.27-4.2 IU/ml)
  - fT3: 2.29 (2.0-4.4pg/ml)
  - fT4: 1.18 (0.93-1.7 ng/dl)
- Urinalysis:  
Protein: +++  
Many erythrocytes  
Nitrite: Negative
- 24 hour urinalysis:  
Protein: 670.4 (40-150mg/24h)  
Creatinine Clearance: 15 (80-120ml/min)







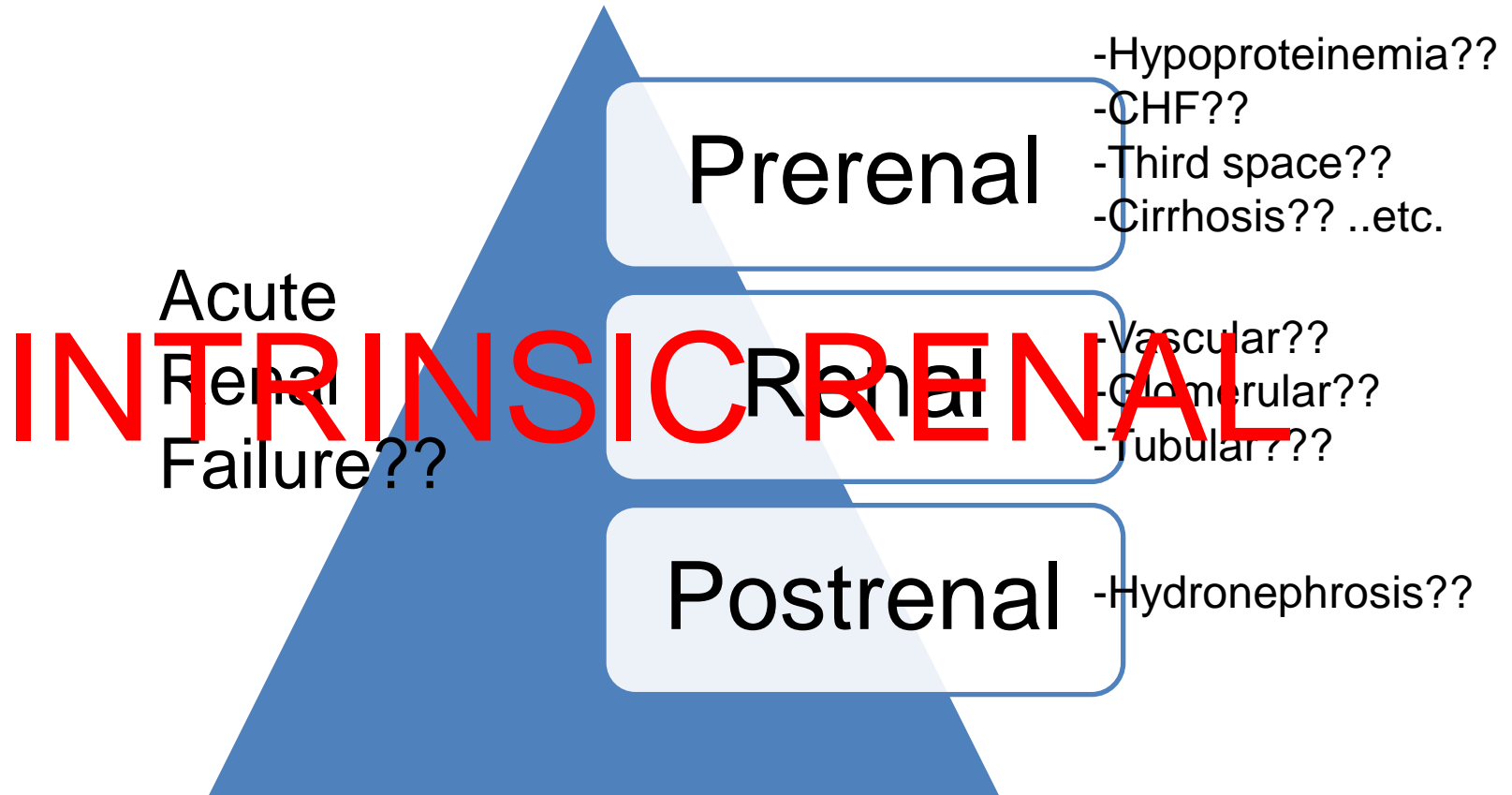
# Renal US: Renal Parenchymal Disease



**Rapidly Progressive???**



# Differential Diagnosis?



## Clinical presentations of glomerular disease

### Asymptomatic

Proteinuria 150 mg to 3 g per day  
Hematuria > 2 red blood cells  
per high-power field in spun urine  
or >  $10 \times 10^6$  cells/L  
(red blood cells usually dysmorphic)

### Macroscopic hematuria

Brown/red painless hematuria  
(no clots); typically coincides with  
intercurrent infection  
Asymptomatic hematuria  $\pm$  proteinuria  
between attacks

### Nephrotic syndrome

Proteinuria: adult > 3.5 g/day;  
child > 40 mg/h per  $m^2$   
Hypoalbuminemia < 3.5 g/dL  
Edema  
Hypercholesterolemia  
Lipiduria

### Nephritic syndrome

Oliguria  
Hematuria: red cell casts  
Proteinuria: usually < 3 g/day  
Edema  
Hypertension  
Abrupt onset, usually  
self-limiting

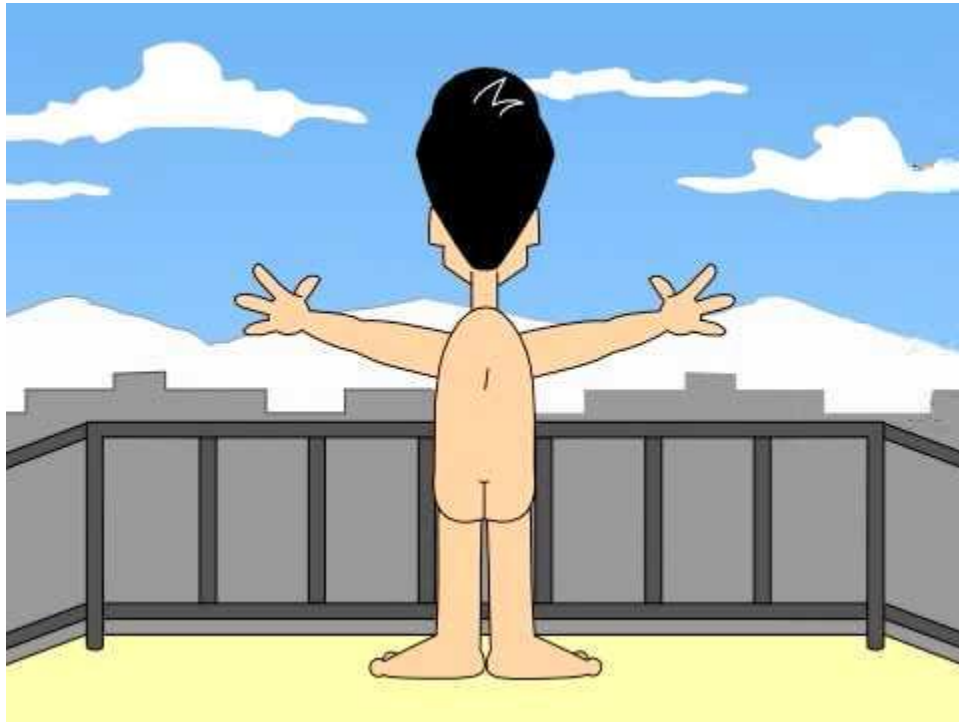
### Rapidly progressive glomerulonephritis

Renal failure over days/weeks  
Proteinuria: usually < 3 g/day  
Hematuria: red cell casts  
Blood pressure often normal  
May have other features of vasculitis

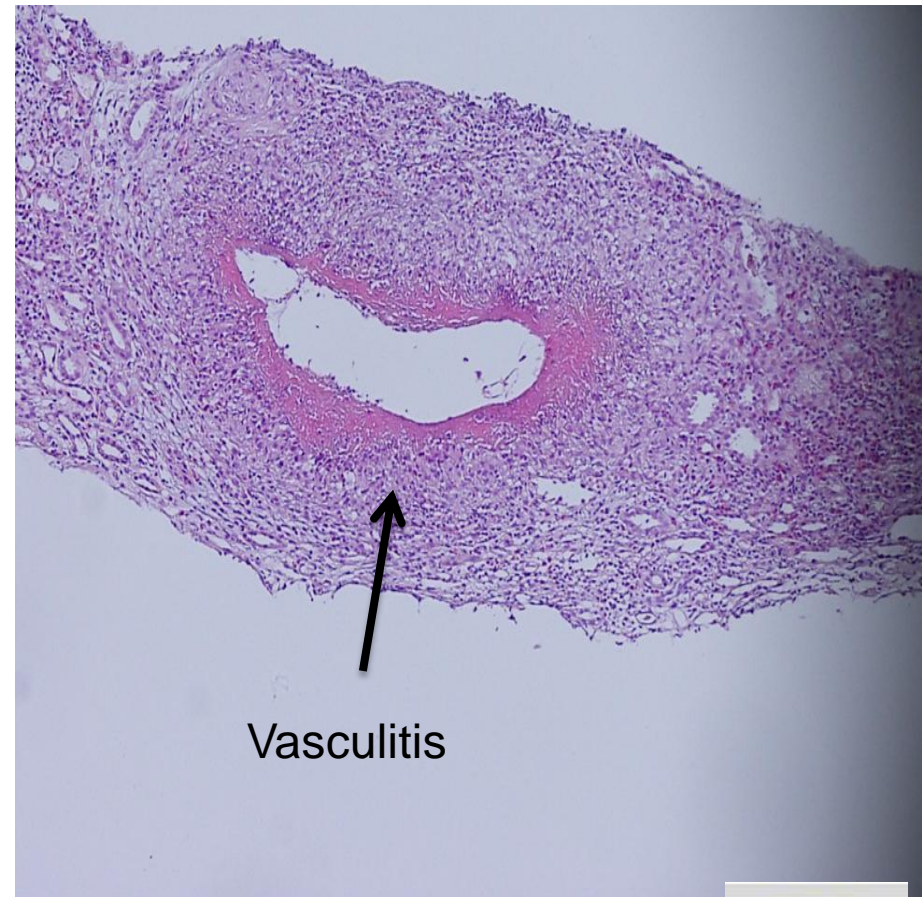
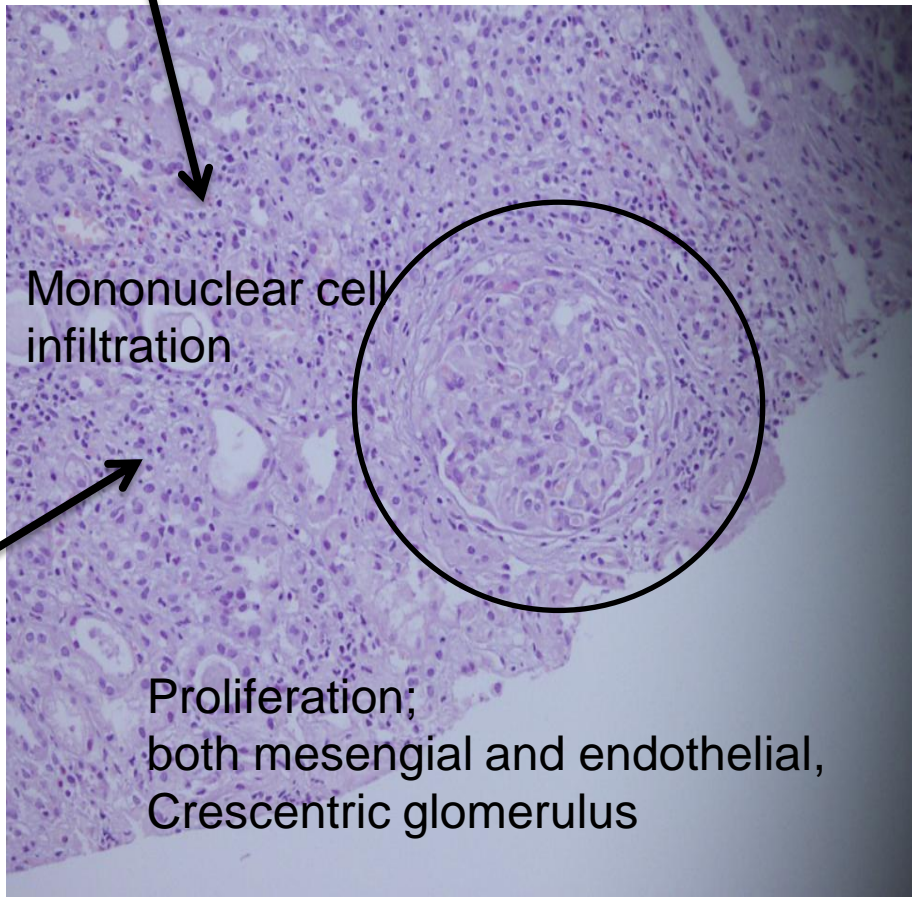
### Chronic glomerulonephritis

Hypertension  
Renal insufficiency  
Proteinuria > 3 g/day  
Shrunken smooth kidneys

# Next Step??



# Renal Biopsy





- Anti-HIV/1-2: -
- Anti-HAV IgG: -
- Anti-HBs: -
- ANA:-
- Anti-HBc Total: -
- Anti-GBM: -
- HBsAg: -
- Gruber-Widal: -
- Anti-HCV: -
- Anti-dsDNA: -
- Anti-HBc IgM: -
- P-ANCA: -
- C-ANCA: +



- Anti-Myeloperoxidase: Negative
- C3: 136 (N)
- C4: 32.1 (N)
- ASO: 44 (N)
- RF: 7.8 (N)
- IgE: 164.04 (N)
- Wright: -

Anti-Proteinase 3 Ab: POZITIVE



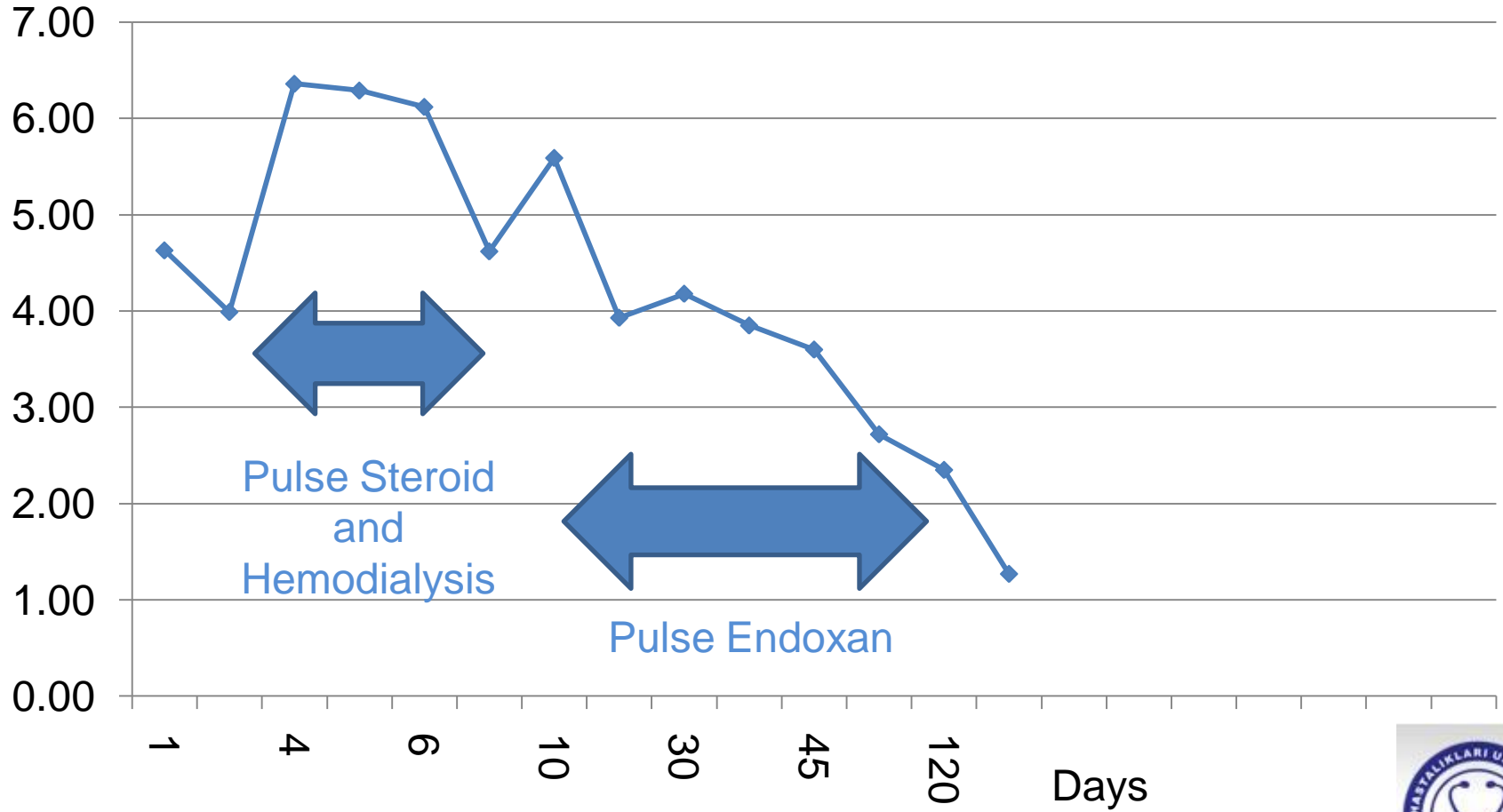
# Diagnosis???



- Wegener Granulomatosis
- ANCA-associated granulomatous vasculitis



Creatinine mg/dl



# WEGENER GRANULOMATOSİS

- Rare multisystem autoimmune disease of unknown origin
- 18% of patients initially had renal disease
- 3 cases per 100000 people
- Slightly more common in men
- Age: 35-55
- Chronic sinusitis is the most common initial complaint (%67)
- Xanthelasma has been reported.
- C-ANCA directed against PR3 is most spesific for WG.
- Focal glomerulonephritis with crescent formation on renal biyosy specimen is characteristic.



The most important message;

Urinalysis can lighten your way, although  
is fast and cheap...





# Thanks for your attention !!!!!

