

Hypertension in chronic kidney disease: *Nephrology Dialysis Transplantation* notable 2017 advances

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Prof. V. Kuzminskio komentaras:

Hipertenzija + CKD (apibendrinimai). Nieko naujo:

- a) kad seniems pacientams su kietomis kraujagyslėmis, eGFG linkęs mažėti;
- b) inkstų denervacija dar nepalaidota;
- c) plaučių ultragarsas HD pacientams rodo volemiją (?)! ← V. K. jiems nespėjo paaiškinti apie volemijos ir hidratacijos skirtumus

Tiek plaučių ultragarsinius tyrimus, tiek BCM rodo audinių vandeningumą (hidrataciją), o volemija – tai kraujagyslių užsipildymas, kuris paprastai matuojamas kaip centrinis veninis spaudimas (CVS).

Con: Tolvaptan for autosomal dominant polycystic kidney disease—do we know all the answers?

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Prof. V. Kuzminskio komentaras:

- Tolvaptanas – policistozei stabdyti.
- 3,2 metai gydymo – 1 metai išlošimo.
- Kaina ~ 100.000 €.
- Nelabai cost-effective.

Long-term follow-up of a combined rituximab and cyclophosphamide regimen in renal anti-neutrophil cytoplasm antibody-associated vasculitis

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Prof. V. Kuzminskio komentaras:

ANCA vaskulitų gydymas, suplakant 2 schemas: 2 g rituksimabo, 3 g ciklofosfamido, 4,2 g prednizolono per 6 mėn. (žr. table 1).

9 mirė, 4 į HD, 20 infekcijų, 6 vėžio, 7 nauji CD atvejai. Schema įdomi, išgyvenus turėtų būti mažiau relapsų (žr. table 4, lyginimus su EUVAS).

Table 1. Treatment protocol

	Agent	Dose
Cytotoxic therapy		
Day 0	Rituximab	1 g
	Cyclophosphamide i.v.	10 mg/kg (maximum 750 mg)
Week 2	Rituximab	1 g
	Cyclophosphamide i.v.	10 mg/kg (max. 750 mg)
Weeks 4, 6, 8 and 10	Cyclophosphamide i.v.	500 mg × 4
Corticosteroid taper		
Week 1	Oral prednisolone	1 mg/kg/day (maximum 60 mg)
Week 2	25% reduction	45 mg
Week 3	33% reduction	30 mg
Week 4	33% reduction	20 mg
Week 6	25% reduction	15 mg
Week 12		Minimum 12.5 mg
Week 20		10 mg
Maintenance therapy		
From Week 12	Azathioprine	1–2 mg/kg/day (adjusted for TPMT levels)
	Mycophenolate mofetil (if intolerant)	1–2 g/day (targeted to trough levels of 1.2–2.4 mg/L)
Prophylactic therapy		
PJP prophylaxis	Co-trimoxazole 480 mg/day	
	Pentamidine nebulizer 300 mg/month (if intolerant)	
	Proton-pump inhibition	
Peptic ulcer prophylaxis	Vitamin D and calcium supplementation	
Bone prophylaxis		
Latent TB prophylaxis (in those from high-risk areas)	Isoniazid 150 mg/day and pyridoxine 50 mg/week	

i.v., intravenous; TPMT, thiopurine methyltransferase enzyme activity; PJP, *Pneumocystis jiroveci* pneumonia; TB, tuberculosis.

Table 4. Case-control comparison with EUVAS trials

	CycLowVas cases	EUVAS controls	P-value
n	66	198	
Baseline features			
Female: male, n (%)	28/38 (42:58)	78/120 (40:60)	0.66
Age (years) median (range)	63 (54.2–73)	63 (53.25–71)	0.75
MPO-PR3 ANCA, n (%)	33/33 (50:50)	99/99 (50:50)	1.00
Baseline eGFR (mL/min), median (range)	25.5 (18–43.7)	27.1 (16.2–40.6)	0.45
Baseline BVAS, median (range)	18.5 (15–21.75)	18.5 (13–23.75)	0.77
Unadjusted outcomes at 6 months			
Remission at 6 months, n (%)	62/66 (96)	141/151 (93.7)	0.88
6-month eGFR (mL/min), median (range)	49 (37.5–67)	45.7 (31.8–62.23)	0.14
6-month ΔeGFR (mL/min), median (range)	13 (1.5–27.5)	11.3 (1.5–24.15)	0.30
Cyclophosphamide dose (g), median (range)	3 (3–3.5)	13.5 (8.6–22.5)	<0.001
Total corticosteroid dose (g), median (range)	4.2 (1.0–6.5)	5.3 (1.1–9.3)	<0.001
Unadjusted long-term outcomes, n (%)			
Relapse	14/66 (21)	61/198 (30.8)	0.18
Relapse PR3-ANCA	5/33 (15)	42/99 (42)	0.008
Relapse MPO-ANCA	9/33 (27)	19/99 (19)	0.46
ESRD	4/66 (6)	28/198 (14)	0.12
Death	9/66 (13.6)	46/198 (23.2)	0.13
Follow-up (days) median (range)	1716 (964–2598)	1878 (999–2946)	

Effects of vadadustat on hemoglobin concentrations in patients receiving hemodialysis previously treated with erythropoiesis-stimulating agents

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Prof. V. Kuzminskio komentaras:

II fazės tyrimas su HIF inhibitoriumi vadadustatu (94 HD pac.): 12% pykino, 11% viduriavo, 10% vėmė. Hb laikėsi neblogai (po EPO).

+ Per os! Įdomu kiek kainuos? Mažina feritiną ir hepcidiną!

Tik II fazė, mažai pacientų, nėra kontrolinės grupės. Teisingesnis šių preparatų pavadinimas yra HIF-PHD inhibitoriai (PHD-prolyl-4-hydroxylase domain – tai fermentas, skaldantis HIF (hypoxia inducible factor)).

Mažėjantis HD arba esant hipoksijai (pvz. aukštai kalnuose), PHD mažėja, tuo pačiu HIF daugėja. HIF didina EPO gamybą, gerina Fe apykaitą. Teoriškai aišku, bet dar reiks palaukti III, IV ir V fazių tyrimų rezultatų.

Do plasma neprilysin activity and plasma neprilysin concentration predict cardiac events in chronic kidney disease patients?

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Prof. V. Kuzminskio komentaras:

Neprilyzinas – natriurezinių peptidų (BNP II) ardytojas + angiotenzino II ardytojas.

Sakubitrilis + valsartanas = Entrestas ← neprilyzino blokatorius (iš interneto).

CKD pacientams didelis neprilyzino aktyvumas neprognozuoja ŠKL blogų išeičių.

BPN skiriasi per inkstus ir būna aukštas esant LIN be širdies nepakankamumo.

CKD pacientams – atsargiai su neprilyzino blokatoriais!

Aminoglycoside exposure and renal function before lung transplantation in adult cystic fibrosis patients

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Prof. V. Kuzminskio komentaras:

Suaugusiems su cistine fibroze aminoglikozidai (pagr. Tobramicinas) ilgai ir dažnai naudojami nepablogino GFG. CKD – EPI didino apie 20 ml/min. tikrąjį GFG. (Žr. straipsnį)

1. Jauni pacientai (32 m.a.)
2. Tobramicinas (10 mg/kg)
3. 1 x dienoje
4. + cistinė fibrozė (blogina reabsorbciją proksimaliniuose kanaliukuose)

Lietuvoje tobramicinas tik akių lašai?

Jauniems aminoglikozidai mažiau veikia inkstus. Tobramicinas mažiau nefrotoksiškas nei gentamicinas.

Vitamin D deficiency and treatment versus risk of infection in end-stage renal disease patients under dialysis: a systematic review and meta-analysis

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Prof. V. Kuzminskio komentaras:

Metaanalizė. HD pacientai

Didesnis vit. D kiekis ar jo naudojimas, mažiau infekcijų

Turbūt reiktų tirti vit. D koncentracijos HD pacientams ir trūkstant – papildyti. Tai liudija ir Vaidos Petrauskienės disertacijos duomenys (gynimas gegužės 16 d.)