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KARDIOLOOGIA TULIPUNKT 2019
Kardioloogia konverents arstidele ja õdedele
Park Inn by Radisson Meriton Conference & Spa Hotel Tallinn

Düslipideemia ja vererõhuravi uusimad juhised

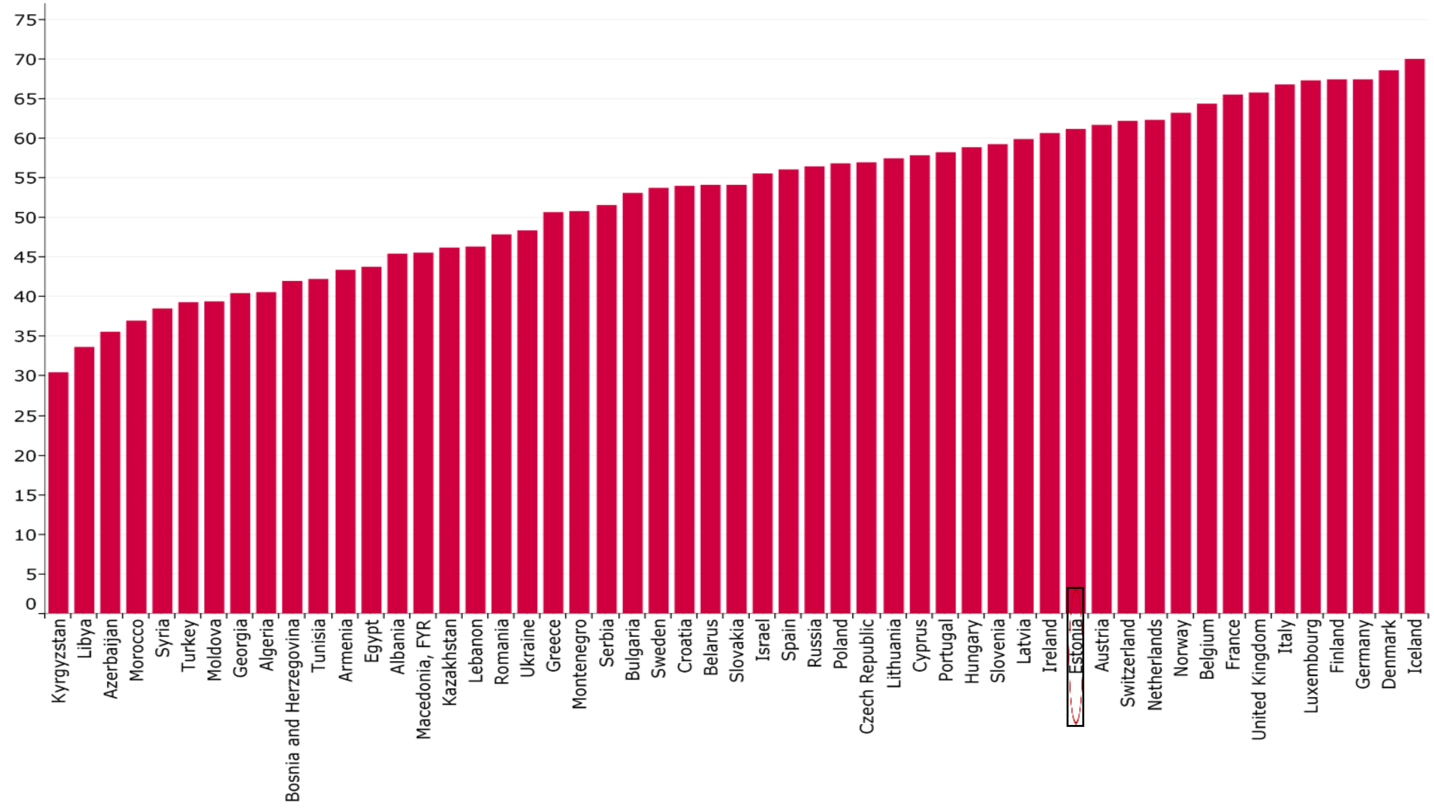
Margus Viigimaa

Regionaalhaigla

EESTI KARDIOLOOGIDE SELTS
ESTONIAN SOCIETY OF CARDIOLOGY

Düslipideemia uusimad ravijuhised

Prevalence of raised total cholesterol (≥ 5.0 mmol/L) (% population), female, 2008



Source: World Health Organization (WHO) (http://apps.who.int/gho/data/node.imr).

2019 ESC/EAS Guidelines for the management of dyslipidaemias: *lipid modification to reduce cardiovascular risk*

The Task Force for the management of dyslipidaemias of the European Society of Cardiology (ESC) and European Atherosclerosis Society (EAS)

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Uued soovitused (ESC/EAS 2019)

Cardiovascular imaging for assessment of ASCVD risk
Assessment of arterial (carotid and/or femoral) plaque burden on arterial ultrasonography should be considered as a risk modifier in individuals at low or moderate risk.
Cardiovascular imaging for assessment of ASCVD risk
CAC score assessment with CT should be considered as a risk modifier in the CV risk assessment of asymptomatic individuals at low or moderate risk.
Lipid analyses for CVD risk estimation
Lp(a) measurement should be considered at least once in each adult person's lifetime to identify those with very high inherited Lp(a) levels >180 mg/dL (>430 nmol/L) who may have a lifetime risk of ASCVD equivalent to the risk associated with heterozygous familial hypercholesterolaemia.
Drug treatments of patients with hypertriglyceridaemia
In high-risk (or above) patients with TG between 1.5 and 5.6 mmol/L (135 - 499 mg/dL) despite statin treatment, n-3 PUFAs (icosapent ethyl 2 × 2g/day) should be considered in combination with statins.
Treatment of patients with heterozygous FH
In primary prevention, for individuals with FH at very-high risk, an LDL-C reduction of ≥50% from baseline and an LDL-C goal of <1.4 mmol/L (<55 mg/dL) should be considered.

Kuvamismeetodid KV riski määramisel

Arterial (carotid and/or femoral) plaque burden on arterial ultrasonography should be considered as a risk modifier in individuals at low or moderate risk.[29,30]	**IIa**	**B**
CAC score assessment with CT should be considered as a risk modifier in the CV risk assessment of asymptomatic individuals at low or moderate risk.[14–16,24,26]	**IIa**	**B**

Uued soovitused (ESC/EAS 2019)

Treatment of dyslipidaemias in older people

Treatment with statins is recommended for primary prevention, according to the level of risk, in older people aged ≤75.

Treatment of dyslipidaemias in older people

Initiation of statin treatment for primary prevention in older people aged >75 may be considered, if at high risk or above.

Treatment of dyslipidaemias in DM

In patients with T2DM at very-high risk, an LDL-C reduction of ≥50% from baseline and an LDL-C goal of <1.4 mmol/L (<55mg/dL) is recommended.

In patients with T2DM at high risk, an LDL-C reduction of ≥50% from baseline and an LDL-C goal of <1.8 mmol/L (<70 mg/dL) is recommended.

Statins are recommended in patients with T1DM who are at high or very-high risk.

Treatment of dyslipidaemias in DM

Intensification of statin therapy should be considered before the introduction of combination therapy.

If the goal is not reached, statin combination with ezetimibe should be considered.

Treatment of dyslipidaemias in DM

Statin therapy is not recommended in pre-menopausal patients with DM who are considering pregnancy or not using adequate contraception.

Lipid-lowering therapy in patients with ACS

For patients who present with an ACS, and whose LDL-C levels are not at goal despite already taking a maximally tolerated statin dose and ezetimibe, adding a PCSK9 inhibitor early after the event (if possible, during hospitalization for the ACS event) should be considered.

Peamised muudatused (ESC/EAS 2016 →2019)

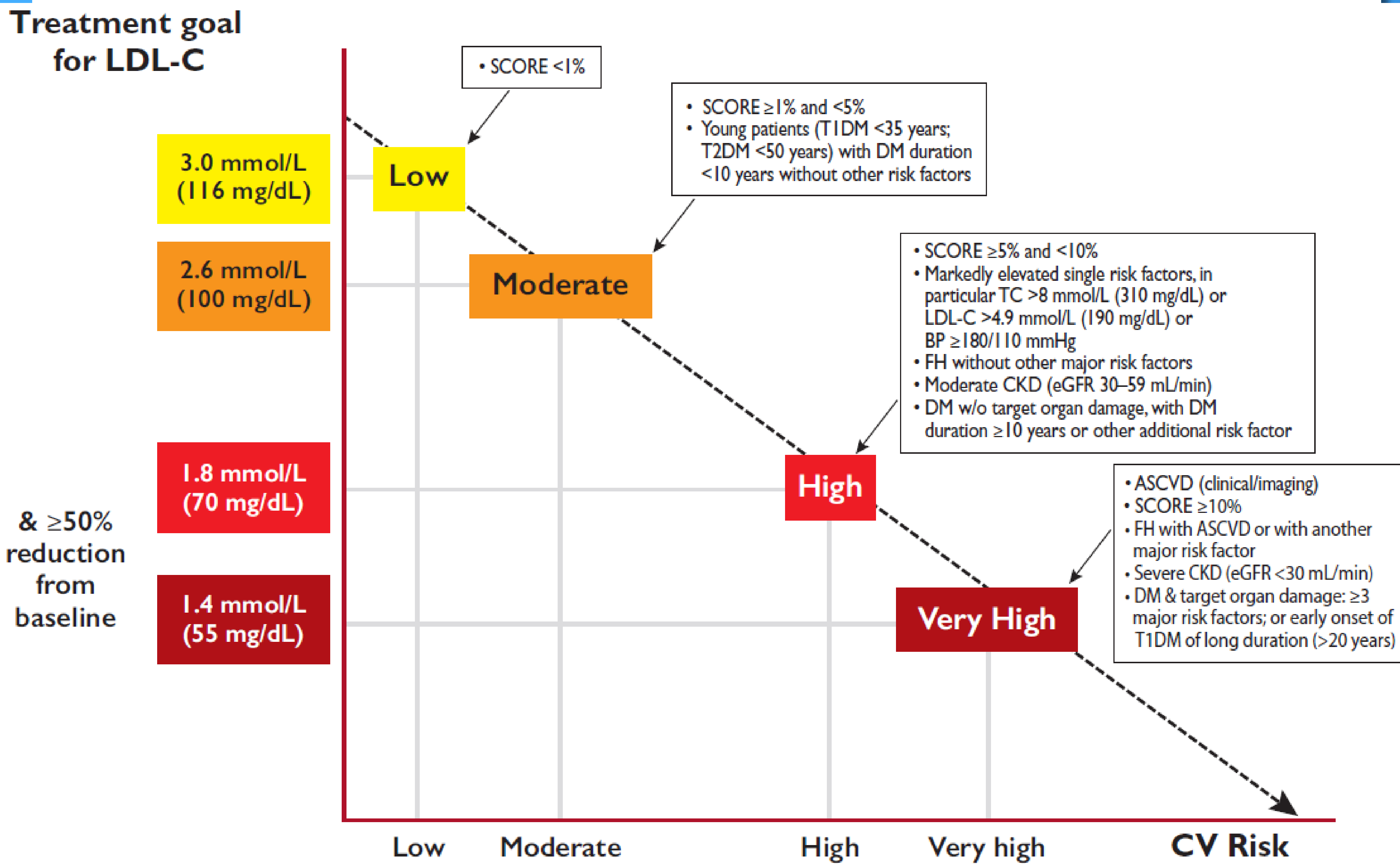
2016	2019
Lipid analyses for CVD risk estimation	**Lipid analyses for CVD risk estimation**
ApoB should be considered as an alternative risk marker whenever available, especially in individuals with high TG.	ApoB analysis is recommended for risk assessment, particularly in people with high TG, DM, obesity or metabolic syndrome, or very low LDL-C. It can be used as an alternative to LDL-C, if available, as the primary measurement for screening, diagnosis, and management, and may be preferred over non-HDL-C in people with high TG, DM, obesity, or very low LDL-C.
Pharmacological LDL-C lowering	**Pharmacological LDL-C lowering**
If the LDL goal is not reached, statin combination with a cholesterol absorption inhibitor should be considered.	If the goals are not achieved with the maximum tolerated dose of statin, combination with ezetimibe is recommended.
Pharmacological LDL-C lowering	**Pharmacological LDL-C lowering**
In patients at very-high risk, with persistent high LDL-C despite treatment with maximal tolerated statin dose, in combination with ezetimibe or in patients with statin intolerance, a PCSK9 inhibitor may be considered.	For secondary prevention, patients at very-high risk not achieving their goal on a maximum tolerated dose of statin and ezetimibe, a combination with a PCSK9 inhibitor is recommended.
	For very-high-risk FH patients (that is, with ASCVD or with another major risk factor) who do not achieve their goals on a maximum tolerated dose of statin and ezetimibe, a combination with a PCSK9 inhibitor is recommended.
Drug treatments of hypertriglyceridaemia	**Drug treatments of hypertriglyceridaemia**
Statin treatment may be considered as the first drug of choice for reducing CVD risk in high-risk individuals with hypertriglyceridaemia.	Statin treatment is recommended as the first drug of choice for reducing CVD risk in high-risk individuals with hypertriglyceridaemia [TG >2.3 mmol/L (200 mg/dL)].

Peamised muudatused (ESC/EAS 2016 →2019)

Treatment of patients with heterozygous FH	**Treatment of patients with heterozygous FH**
Treatment should be considered to aim at reaching an LDL-C <2.6 mmol/L (<100 mg/dL) or in the presence of CVD <1.8 mmol/L (<70 mg/dL). If targets cannot be reached, maximal reduction of LDL-C should be considered using appropriate drug combinations.	For FH patients with ASCVD who are at very-high risk, treatment to achieve at least a 50% reduction from baseline and an LDL-C <1.4 mmol/L (<55 mg/dL) is recommended. If goals cannot be achieved, a drug combination is recommended.
Treatment of patients with heterozygous FH	**Treatment of patients with heterozygous FH**
Treatment with a PCSK9 antibody should be considered in FH patients with CVD or with other factors putting them at very-high risk for CHD, such as other CV risk factors, family history, high Lp(a), or statin intolerance.	Treatment with a PCSK9 inhibitor is recommended in very-high-risk FH patients if the treatment goal is not achieved on maximal tolerated statin plus ezetimibe.
Treatment of dyslipidaemias in older adults	**Treatment of dyslipidaemias in older people**
Since older people often have comorbidities and have altered pharmacokinetics, lipid-lowering medication should be started at a lower dose and then titrated with caution to achieve target lipid levels that are the same as in younger people.	It is recommended that the statin is started at a low dose if there is significant renal impairment and/or the potential for drug interactions, and then titrated upwards to achieve LDL-C treatment goals.
Lipid-lowering therapy in patients with ACS	**Lipid-lowering therapy in patients with ACS**
If the LDL-C target is not reached with the highest tolerated statin dose and/or ezetimibe, PCSK9 inhibitors may be considered on top of lipid-lowering therapy; or alone or in combination with ezetimibe in statin-intolerant patients or in whom a statin is contraindicated.	If the LDL-C goal is not achieved after 4 - 6 weeks despite maximal tolerated statin therapy and ezetimibe, addition of a PCSK9 inhibitor is recommended.

KV preventsiooni meetmed ja eesmärgid (ESC/EAS 2019)

Smoking	No exposure to tobacco in any form.
Diet	Healthy diet low in saturated fat with a focus on wholegrain products, vegetables, fruit, and fish.
Physical activity	3.5–7 h moderately vigorous physical activity per week or 30–60 min most days.
Body weight	BMI 20–25 kg/m^2, and waist circumference <94 cm (men) and <80 cm (women).
Blood pressure	<140/90 mmHg.[a]
LDL-C	**Very-high risk in primary or secondary prevention:** A therapeutic regimen that achieves ≥50% LDL-C reduction from baseline[b] and an LDL-C goal of <1.4 mmol/L (<55 mg/dL). No current statin use: this is likely to require high-intensity LDL-lowering therapy. Current LDL-lowering treatment: an increased treatment intensity is required. **High risk:** A therapeutic regimen that achieves ≥50% LDL-C reduction from baseline[b] and an LDL-C goal of <1.8 mmol/L (<70 mg/dL). **Moderate risk:** A goal of <2.6 mmol/L (<100 mg/dL). **Low risk:** A goal of <3.0 mmol/L (<116 mg/dL).
Non-HDL-C	Non-HDL-C secondary goals are <2.2, 2.6, and 3.4 mmol/L (<85, 100, and 130 mg/dL) for very-high-, high-, and moderate-risk people, respectively.
ApoB	ApoB secondary goals are <65, 80, and 100 mg/dL for very-high-, high-, and moderate-risk people, respectively.
Triglycerides	No goal, but <1.7 mmol/L (<150 mg/dL) indicates lower risk and higher levels indicate a need to look for other risk factors.
Diabetes	HbA1c: <7% (<53 mmol/mol).

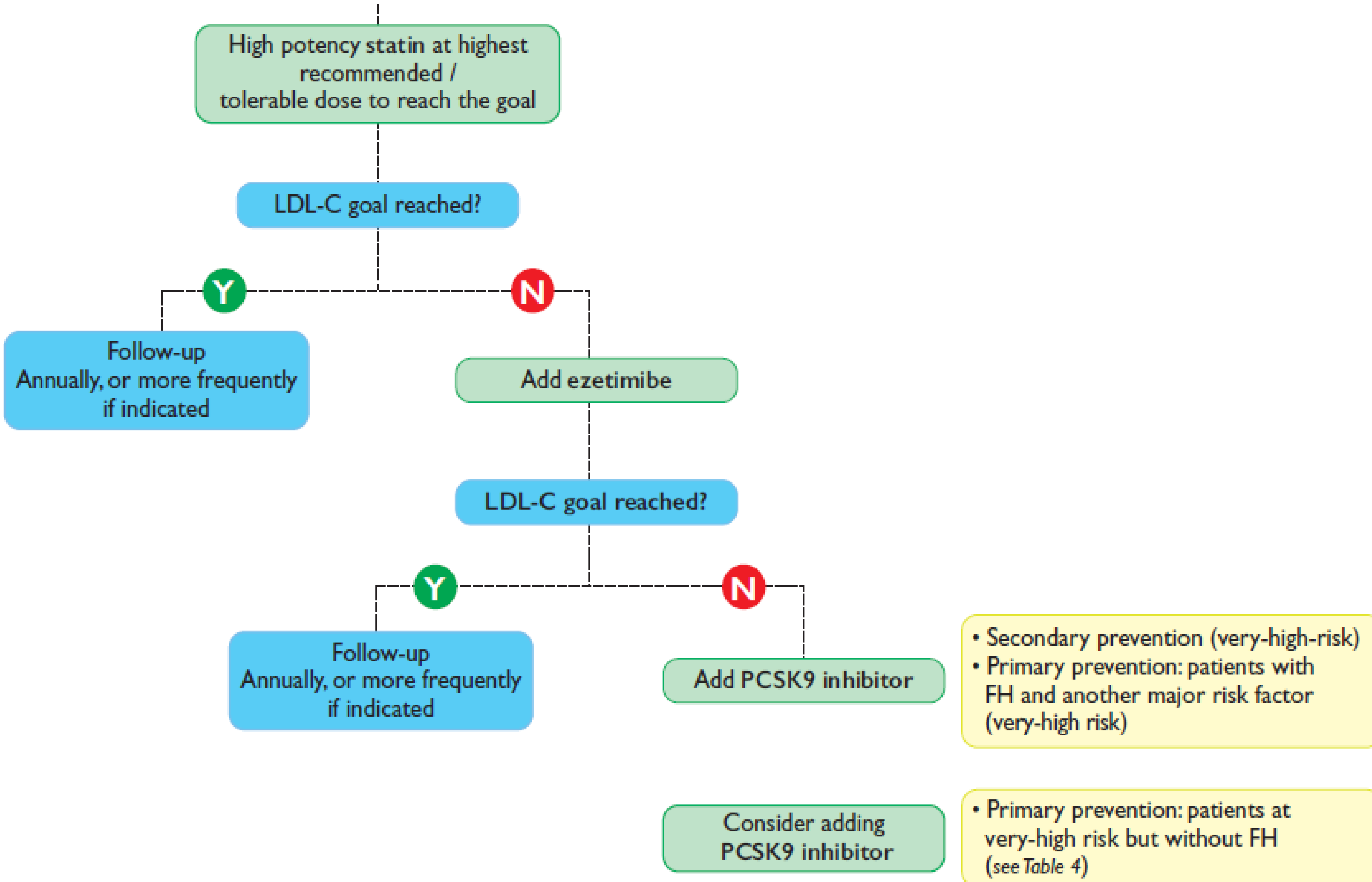


Treatment goal for LDL-C
3.0 mmol/L (116 mg/dL)
2.6 mmol/L (100 mg/dL)
1.8 mmol/L (70 mg/dL)
1.4 mmol/L (55 mg/dL)
& ≥50% reduction from baseline
• SCORE <1%
Low
• SCORE ≥1% and <5%
• Young patients (T1DM <35 years; T2DM <50 years) with DM duration <10 years without other risk factors
Moderate
• SCORE ≥5% and <10%
• Markedly elevated single risk factors, in particular TC >8 mmol/L (310 mg/dL) or LDL-C >4.9 mmol/L (190 mg/dL) or BP ≥180/110 mmHg
• FH without other major risk factors
• Moderate CKD (eGFR 30–59 mL/min)
• DM w/o target organ damage, with DM duration ≥10 years or other additional risk factor
High
• ASCVD (clinical/imaging)
• SCORE ≥10%
• FH with ASCVD or with another major risk factor
• Severe CKD (eGFR <30 mL/min)
• DM & target organ damage: ≥3 major risk factors; or early onset of T1DM of long duration (>20 years)
Very High
Low
Moderate
High
Very high
CV Risk

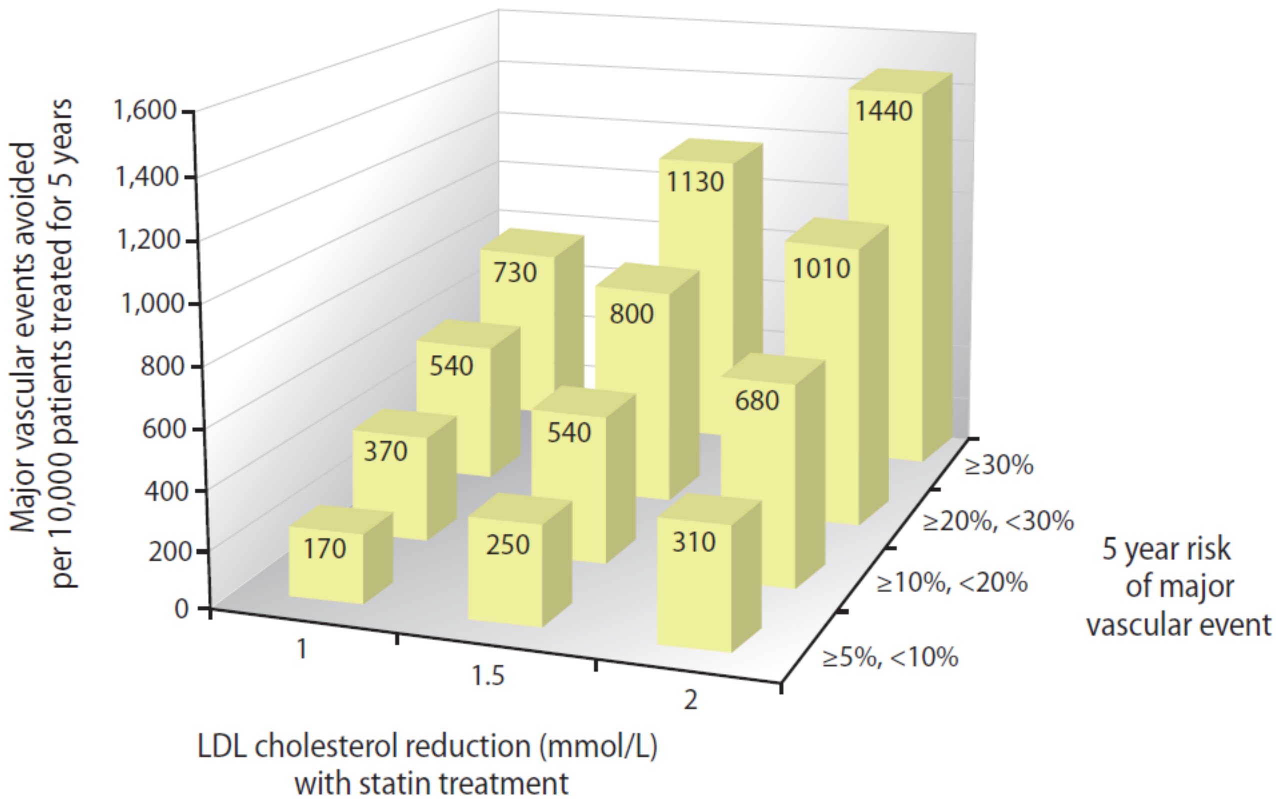
Lipiidelangetava ravi efektiivsus (ESC/EAS 2019)

Treatment	Average LDL-C reduction
Moderate intensity statin	≈ 30%
High intensity statin	≈ 50%
High intensity statin plus ezetimibe	≈ 65%
PCSK9 inhibitor	≈ 60%
PCSK9 inhibitor plus high intensity statin	≈ 75%
PCSK9 inhibitor plus high intensity statin plus ezetimibe	≈ 85%

Ravialgoritm LDL-C langetamiseks (ESC/EAS 2019)



Pikaajaline statiinravi on efektiivne (ESC/EAS 2019)



PCSK9 inhibiitorite ravisoovitused (ESC/EAS 2019)

For secondary prevention, patients at very-high risk not achieving their goal[c] on a maximum tolerated dose of a statin and ezetimibe, a combination with a PCSK9 inhibitor is recommended.[119,120]	I	A
For very-high-risk FH patients (that is, with ASCVD or with another major risk factor) who do not achieve their goal[c] on a maximum tolerated dose of a statin and ezetimibe, a combination with a PCSK9 inhibitor is recommended.	I	C

Hüpertensiooni uusimad ravijuhised

Vererõhu kategooriad (ACC/AHA 2017)

Table 6. Categories of BP in Adults*

BP Category	SBP		DBP
Normal	<120 mm Hg	and	<80 mm Hg
Elevated	120–129 mm Hg	and	<80 mm Hg
Hypertension			
Stage 1	130–139 mm Hg	or	80–89 mm Hg
Stage 2	≥140 mm Hg	or	≥90 mm Hg

*Individuals with SBP and DBP in 2 categories should be designated to the higher BP category.

BP indicates blood pressure (based on an average of ≥2 careful readings obtained on ≥2 occasions, as detailed in Section 4); DBP, diastolic blood pressure; and SBP systolic blood pressure.

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ESC
European Society of Cardiology
European Heart Journal (2018) **00**, 1–98
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ESC/ESH GUIDELINES

2018 ESC/ESH Guidelines for the management of arterial hypertension

The Task Force for the management of arterial hypertension of the European Society of Cardiology (ESC) and the European Society of Hypertension (ESH)

Vererõhu kategooriad (ESC/ESH 2018)

Category	Systolic (mmHg)		Diastolic (mmHg)
Optimal	<120	and	<80
Normal	120–129	and/or	80–84
High normal	130–139	and/or	85–89
Grade 1 hypertension	140–159	and/or	90–99
Grade 2 hypertension	160–179	and/or	100–109
Grade 3 hypertension	≥180	and/or	≥110
Isolated systolic hypertension[b]	≥140	and	<90

Hüpertensiooni definitsioon (ESC/ESH 2018)

- Hüpertensioon diagnoositakse, kui kabinetivererõhk on püsivalt väärtustes **140/90** mm Hg või üle selle.
- See on ekvivalentne kodusel mõõtmisel saadud väärtustega (kodune vererõhk) **135/85** mm Hg või üle selle.
- või 24tunnisel vererõhu monitooringul saadud väärtustega **130/80** mm Hg või üle selle.

Hüpertensiooni organkahjustuse määramine (ESC/ESH 2018)

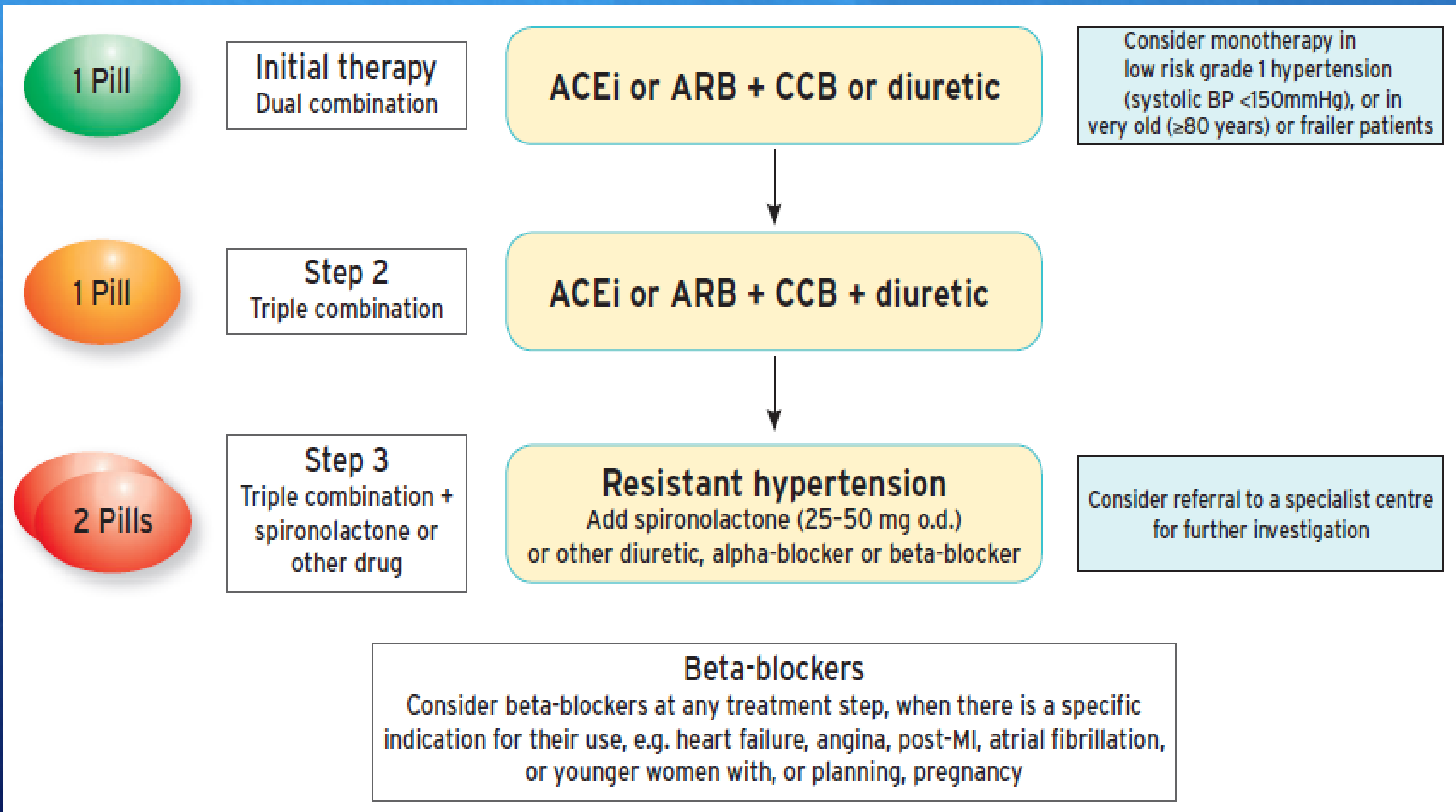
Marker of HMOD	Sensitivity to changes	Reproducibility and operator independence	Time to changes	Prognostic value of the change
LVH by ECG	Low	High	Moderate (>6 months)	Yes
LVH by echocardiogram	Moderate	Moderate	Moderate (>6 months)	Yes
LVH by CMR	High	High	Moderate (>6 months)	No data
eGFR	Moderate	High	Very slow (years)	Yes
Urinary protein excretion	High	Moderate	Fast (weeks to months)	Moderate
Carotid IMT	Very low	Low	Slow (>12 months)	No
PWV	High	Low	Fast (weeks to months)	Limited data
Ankle-brachial index	Low	Moderate	Slow (>12 months)	Moderate

Enamikul patsientidel tuleb ravi alustada kahe antihüpertensiivse ravimi kombinatsiooniga

- Monoteraapia on enamikule patsientidest ebaefektiivne, eriti nüüd, mil praegune ravijuhend soovitab raviga saavutada madalamad vererõhu väärtused
- Soovitatav on ravi alustada kahe antihüpertensiivse ravimi kombinatsiooniga
- Erandiks on:

- patsiendid, kel vererõhu väärtused ületavad eesmärkväärtusi ainult vähe (süstoolne RR 140-150 mm Hg) ja
- eakad patsiendid, kel oleks soovitatav vererõhku ettevaatlikumalt langetada

Hüpertensiooni ravialgoritm (ESC/ESH 2018)



Choice of antihypertensive drug[1], monitoring treatment and BP targets

	Hypertension with type 2 diabetes	Hypertension without type 2 diabetes: Age <55 and not of black African or African–Caribbean family origin	Hypertension without type 2 diabetes: Age 55 or over	Hypertension without type 2 diabetes: Black African or African–Caribbean family origin (any age)
Step 1	ACEi **or** ARB[2,3]	ACEi **or** ARB[2,3]	CCB	CCB
Step 2	ACEi or ARB[2,3] + CCB **or** thiazide-like duiretic	ACEi or ARB[2,3] + CCB **or** thiazide-like duiretic	CCB + ACEi or ARB[2,3] **or** thiazide-like duiretic	CCB + ACEi or ARB[2,3] **or** thiazide-like duiretic
Step 3	ACEi **or** ARB[2,3] + CCB + thiazide-like duiretic	ACEi **or** ARB[2,3] + CCB + thiazide-like duiretic	ACEi **or** ARB[2,3] + CCB + thiazide-like duiretic	ACEi **or** ARB[2,3] + CCB + thiazide-like duiretic

Step 4

Confirm resistant hypertension: confirm elevated BP with ABPM or HBPM, check for postural hypertension and discuss adherence

Consider seeking expert advice **or** adding a:

- low-dose spironolactone[4] if blood potassium level is ≤4.5 mmol/l
- alpha-blocker or beta-blocker if blood potassium level is >4.5 mmol/l

Seek expert advice if BP is uncontrolled on optimal tolerated doses of 4 drugs

Use clinical judgement for people with frailty or multimorbidity

Offer lifestyle advice and continue to offer it periodically

Monitoring treatment

Use clinic BP to monitor treatment.

Measure standing and sitting BP in people with:

- type 2 diabetes **or**
- symptoms of postural hypotension **or**
- aged 80 and over.

Advise people who want to self-monitor to use HBPM. Provide training and advice.

Consider ABPM or HBPM, in addition to clinic BP, for people with white-coat effect or masked hypertension.

BP targets

Reduce and maintain BP to the following targets:

Age <80 years:

- Clinic BP <140/90 mmHg
- ABPM/HBPM <135/85 mmHg

Age ≥80 years:

- Clinic BP <150/90 mmHg
- ABPM/HBPM <145/85 mmHg

Postural hypotension:

- Base target on standing BP

Frailty or multimorbidity:

- Use clinical judgement

[1] For women considering pregnancy or who are pregnant or breastfeeding, see NICE's guideline on hypertension in pregnancy. For people with chronic kidney disease, see NICE's guideline on chronic kidney disease. For people with heart failure, see NICE's guideline on chronic heart failure

[2] See MHRA drug safety updates on ACE inhibitors and angiotensin-II receptor antagonists: not for use in pregnancy, which states 'Use in women who are planning pregnancy should be avoided unless absolutely necessary, in which case the potential risks and benefits should be discussed', ACE inhibitors and angiotensin II receptor antagonists: use during breastfeeding and clarification: ACE inhibitors and angiotensin II receptor antagonists. See also NICE's guideline on hypertension in pregnancy.

[3] Consider an ARB, in preference to an ACE inhibitor in adults of African and Caribbean family origin.

[4] At the time of publication (August 2019), not all preparations of spironolactone have a UK marketing authorisation for this indication.

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This visual summary builds on and updates previous work on treatment published by the BIHS (formerly BHS)

Abbreviations: ABPM, ambulatory blood pressure monitoring; ACEi, ACE inhibitor; ARB, angiotensin-II receptor blocker; BP, blood pressure; CCB, calcium-channel blocker; HBPM, home blood pressure monitoring

ESC European Society of Cardiology

European Heart Journal (2019) **00**, 1–69
doi:10.1093/eurheartj/ehz486

ESC GUIDELINES

2019 ESC Guidelines on diabetes, pre-diabetes, and cardiovascular diseases developed in collaboration with the EASD

The Task Force for diabetes, pre-diabetes, and cardiovascular diseases of the European Society of Cardiology (ESC) and the European Association for the Study of Diabetes (EASD)

Authors/Task Force Members: Francesco Cosentino* (ESC Chairperson) (Sweden), Peter J. Grant* (EASD Chairperson) (United Kingdom), Victor Aboyans (France), Clifford J. Bailey[1] (United Kingdom), Antonio Ceriello[1] (Italy), Victoria Delgado (Netherlands), Massimo Federici[1] (Italy), Gerasimos Filippatos (Greece), Diederick E. Grobbee (Netherlands), Tina Birgitte Hansen (Denmark),

Antihüpertensiivne ravi II tüüpi diabeedi patsientidel(ESC/EASD 2019)

Lifestyle changes [weight loss if overweight, physical activity, alcohol restriction, sodium restriction, and increased consumption of fruits (e.g. 2–3 servings), vegetables (e.g. 2–3 servings), and low-fat dairy products] are recommended in patients with DM and pre-DM with hypertension.[161–163,166]	I	A
A RAAS blocker (ACEI or ARB) is recommended in the treatment of hypertension in patient with DM, particularly in the presence of microalbuminuria, albuminuria, proteinuria, or LV hypertrophy.[167–170]	I	A
It is recommended that treatment is initiated with a combination of a RAAS blocker with a calcium channel blocker or thiazide/thiazide-like diuretic.[167–171]	I	A
In patients with IFG or IGT, RAAS blockers should be preferred to beta-blockers or diuretics to reduce the risk of new-onset DM.[173–175]	IIa	A
The effects of GLP1-RAs and SGLT2 inhibitors on BP should be considered.	IIa	C
Home BP self-monitoring should be considered in patients with DM on antihypertensive treatments to check that their BP is appropriately controlled.[184]	IIa	C
24 h ABPM should be considered to assess abnormal 24 h BP patterns and adjust antihypertensive treatment.[185]	IIa	C

Hüpertensiooni ravi eesmärkväärtused (ESC/ESH 2018)

Vanuserühm	Süstoolse vererõhu kabinetimõõtmiste eesmärkväärtused (mm Hg)					Diastoolse vererõhu kabineti-mõõtmiste eesmärk-väärtused (mm Hg)
	Hüpertensioon	+ diabeet	+ krooniline neeruhaigus	+ koronaar-haigus	+ ajuinsult / transitoorne isheemiline atakk	
18–65 aastat	Eesmärk kuni 130 *või madalam kui talutav* mitte alla 120 mm Hg	Eesmärk kuni 130 *või madalam kui talutav* mitte alla 120 mm Hg	Eesmärk kuni < 140 kuni 130 *või madalam kui talutav*	Eesmärk kuni 130 *või madalam kui talutav* mitte alla 120 mm Hg	Eesmärk kuni 130 *või madalam kui talutav* mitte alla 120 mm Hg	70–79
65–79 aastat	Eesmärk kuni 130–139 *kui talutav*	Eesmärk kuni 130–139 *kui talutav*	Eesmärk kuni 130–139 *kui talutav*	Eesmärk kuni 130–139 *kui talutav*	Eesmärk kuni 130–139 *kui talutav*	70–79
≥ 80 aasta	Eesmärk kuni 130–139 *kui talutav*	Eesmärk kuni 130–139 *kui talutav*	Eesmärk kuni 130–139 *kui talutav*	Eesmärk kuni 130–139 *kui talutav*	Eesmärk kuni 130–139 *kui talutav*	70–79
Kabineti-mõõtmiste eesmärk-väärtused (mm Hg)	70–79	70–79	70–79	70–79	70–79	

Statiinravi on oluline hüperteooniku ravi komponent

- Ravijuhendis rõhutatakse statiinravi olulisust kõrgvererõhktõvega haigetel
- Viidatakse, et seda tuleks veelgi laiemalt kasutada
- Statiinravi vähendab hüpertoonikul südameinfarkti riski umbes kolmandiku võrra ja ajuinsuldi riski ligikaudu veerandi võrra ning seda ka juhul, kui vererõhk on ohjatud

Hüpertensiooni ja seksuaalne düsfunktsioon (ESC/ESH 2018)

vided strong evidence that in men, erectile dysfunction (i.e. inadequate penile erection) is a significant independent risk factor for CV events and mortality,[575] which means that it may be viewed as an early marker of vascular damage.[576] Sexual dysfunction may be triggered or aggravated by treatment with thiazide or thiazide-like diuretics, conventional beta-blockers, or centrally acting agents (e.g. clonidine), while ACE inhibitors, ARBs, CCBs, or vasodilating beta-blockers may have neutral or even beneficial effects.[574,577] Phosphodiesterase-5 inhibitors are effective against erectile dysfunction in patients with hypertension. They should be given only in the

Erectile Dysfunction in Hypertension and Cardiovascular Disease

A Guide for Clinicians

Margus Viigimaa
Charalambos Vlachopoulos
Michael Doumas
Editors

Springer

ÜLEVAADE

Erektiilse düsfunktsiooni ja arteriaalse hüpertensiooni seosed

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Erektiilne düsfunktsioon (ED) on püsiv võimetus saavutada või säilitada rahuldavaks seksuaalseks vahekorraks piisavat erektsiooni. Tegu on sagedasima meeste seksuaalfunktsiooni häirega, mis vähendab oluliselt patsientide ja nende seksuaalpartnerite elukvaliteeti ning võib sageli olla peamine motivaator arstiabi poole pöödumiseks. Enim levinud on vaskulaarse geneesiga ED, mille põhjuseks on peenise arterite aterosklerootiline kahjustus. ED esinemissagedus on suurem kaasuvate südame-veresoonkonnahaiguste või riskitegurite, näiteks arteriaalse hüpertensiooni korral. ED võib sageli olla esimene kaebus patsiendil, kellel esineb diagnoosimata südame isheemiatõbi või perifeersete arterite haigus, seetõttu peaks ED avaldumine juhtima tähelepanu ka patsiendi kardiovaskulaarsele riskiprofiilile. Erektiilset funktsiooni võivad mõjutada antihüpertensiivsed ravimid, mistõttu on ED ravi alustamisel fosfodiesteraas-5 (PDE-5) inhibiitoritega vaja korrigeerida raviskeemi ka potentsiaalselt erektiilset funktsiooni

RAVIJUHEND

TÄISKASVANUTE KÕRGVERERÕHKTÕVE KÄSITLUS ESMATASANDIL

Eesti ravijuhend

RJ-

Ravijuhendi töörühma liikmed:

Ruth Kalda (töörühma juht)	Eesti Perearstide Selts; Tartu Ülikooli peremeditsiini ja rahvatervishoiu instituudi juhataja; OÜ Ülikooli Perearstikeskus
Margus Viigimaa	Eesti Kardioloogide Selts; Eesti Hüpertensiooni Ühing; SA Põhja-Eesti Regionaalhaigla
Eret Jaanson	Eesti Perearstide Selts; Linnamõisa Perearstikeskus OÜ; Confido Erameditsiinikeskus
Alar Irs	Eesti Kardioloogide Selts; SA TÜ Kliinikum
Irina Tohus	Eesti Õdede Liit (EÕL); Nõmme perearstikeskus OÜ Meditiim
Kaja-Triin Laisaar	Tartu Ülikooli meditsiiniteaduste valdkonna ravijuhendite püsisekretariaadi metoodikakonsultant; Tartu Ülikooli peremeditsiini ja rahvatervishoiu instituudi teadur
Külli Friedmann	Eesti Haigekassa

Ravijuhendi sekretariaadi liikmed:

Signe Alliksoo (sekretariaadi juht)	Eesti Hüpertensiooni Ühing; Eesti Perearstide Selts Dr. Signe Alliksoo Perearstipraksis
Elise Lätt	Tartu Ülikooli meditsiiniteaduste valdkond
Liina Kask-Flight	Tartu Kesklinna Perearstikeskus OÜ
Kadi Kallavus	Tartu Ülikooli meditsiiniteaduste valdkonna ravijuhendite püsisekretariaadi metoodikanõunik

Soovituslik viitamine: Täiskasvanute kõrgvererõhktõve käsitlus esmatasandil, RJ-. Ravijuhendite nõukoda. 2019

Otsingusõnad: kõrgvererõhktõbi, hüpertensioon, üldarstiabi, perearstiabi, ravijuhend, tõenduspõhine meditsiin, kvaliteet tervishoius.

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Soovituse tugevus ja suund (Guyatt 2008)

<table>
<tr><td>Tugev soovitus teha</td><td rowspan="4">Soovituse tugevus peegeldab seda, kui kindel võib olla, et interventsioonist saadav kasu ületab võimaliku kahju.
Soovituse tugevuse määravad järgmised tegurid:
- soovitud ja soovimatu toime vahelise erinevuse suurus;
- teadusliku tõenduse kvaliteet;
- patsientide eelistuste varieeruvuse määr;
- ressursikulu.
Tugev soovitus antakse, kui on kindel, et enamus hästi informeeritud patsiente otsustaksid kõne-aluse interventsiooni kasuks.
Nõrga soovituse puhul on ette näha, et patsiendi suhtumine sekkumise valikusse sõltub isiklikest väärtustest ja eelistustest, ning arst peab olema kindel, et neid on arvestatud.
Tugev soovitus on väljendatud sõnadega „tehke, kasutage“, nõrk soovitus väljenditega „võib teha, kaaluge tegemist“.</td></tr>
<tr><td>Soovitus pigem teha</td></tr>
<tr><td>Soovitus pigem mitte teha</td></tr>
<tr><td>Tugev soovitus mitte teha</td></tr>
</table>

Hea tava suunised

<table>
<tr><td></td><td>Ravijuhend sisaldab suuniseid, mis põhinevad ravijuhendi töörühma liikmete kliinilisel kogemusel, ja mis võivad olla praktikas abiks parima ravitulemuse saamisel.</td></tr>
</table>

Farmakoteraapia	
	1. astme hüpertensiooni puhul alustage kohe farmakoteraapiat koos mittefarmakoloogilise raviga alla 80-aastastel patsientidel, kellel on kõrge südame-veresoonkonna haiguste üldine risk (organikahjustus, diabeet, krooniline neeruhaigus, kaasuv südame-veresoonkonna haigus või südame-veresoonkonna haiguste 10 aasta suremuse risk 5% või enam).
	2. astme hüpertensiooni puhul alustage olenemata vanusest kohe farmakoteraapiat koos mittefarmakoloogilise raviga.
	Jälgige ravi tõhusust arstivisiidil mõõdetud vererõhuväärtuste alusel. Valge kitli hüpertensiooni kahtluse korral kasutage nii visiidil kui ka kodus mõõdetud vererõhuväärtusi.
	Alla 65-aastastel patsientidel püüdke saavutada vererõhuväärtus 120–130/80mmHg (süstoolne vererõhk mitte < 120 mmHg) ja üle 65-aastastel 130–140/80 mmHg. *Tugev soovitus, mõõdukas tõendatuse aste* **[kaasajastatud 2019]**
	Organikahjustuse olemasolul või kaasuva diabeedi puhul püüdke saavutada vererõhuväärtus 120-129/alla 80 mmHg.
	Seadke vererõhu eesmärkväärtuse saavutamiseks selge ajagraafik ja pidage sellest kinni. Tõhustage/kohandage ravi iga nelja nädala järel, kuni eesmärk on saavutatud. Olenevalt patsiendi ravitaluvusest peaks vererõhu eesmärkväärtuse saavutama 2–3 kuuga. *Praktiline soovitus* **[kaasajastatud 2019]**
	Arvestage farmakoteraapia valikul patsiendi kaasuvaid haigusi ning ravimite kasulikke ja kahjulikke toimeid nende suhtes.
	Tutvustage patsiendile määratud ravimi(te) kõrvaltoimeid. Ka väikesed vererõhku langetavate ravimite annused võivad ravi algul põhjustada hüpotensiooni.
	Tutvustage patsiendile määratud ravimi(te) kõrvaltoimeid. Ka väikesed vererõhku langetavate ravimite annused võivad ravi algul põhjustada hüpotensiooni.
	Kui patsiendil ei ole kaasuvaid seisundeid, mis nõuaksid mingi ravimirühma eelistamist, määrake esimesena kõrgvererõhktõve raviks soodsaima angiotensiini konverteeriva ensüümi inhibiitori (AKEI) või kaltsiumikanalite blokaatori (KKB) soovitatud algannus.
	Reproduktiivses eas naisele kõrgvererõhktõve ravi määramisel arvestage, et AKEI-d ja angiotensiini retseptorite blokaatorid (ARB-d) on raseduse puhul vastunäidustatud. Rääkige sellest patsiendile.

SUUR TÄNU!