Hypertensie
Beter Bloeddruk Behandelen

- eenvoudig stappenplan voor doeltreffende behandeling van moeilijk te behandelen hypertensie
- aandacht voor moderne multidisciplinaire aanpak
- Avinash Ishwardat
Intro
Stepwise work-up strategy urgently needed.
Stepwise protocol
Stepwise Suriname
NICE/BHS algorithm for uncomplicated Hypertension

Disclaimer: None
Despite a wealth of evidence showing that lowering blood pressure (BP) reduces the risk of CVD in a cost-effective way:

Attributable to hypertension:
54% of all strokes
47% of all coronary heart diseases
20% of all heart failure cases

Complications related to a poor BP control still absorb 10% of the world’s healthcare expenditure.

In general, GPs follow the recommendations of the most recent Dutch and Surinamese guidelines on cardio-vascular risk management. Despite these (inter)national guidelines a recent study showed that the majority patients who were referred because of uncontrolled hypertension could be treated in primary care.
Every GP is familiar with the difficulty to control BP in general. 5-10% of the patients with hypertension receive at least three antihypertensive drugs, and yet have an office BP > 140/90 mmHg who were referred from primary care to a tertiary hospital:

- 19% had a normal blood pressure,
- 22% had a white coat hypertension,
- 12% had a secondary cause for their hypertension
- 12% the internist managed to control the blood pressure by optimalisation of the medication.

There is still need for improvement of adequate recognition and management of uncontrolled hypertension in primary care

Thus, it seems that general practitioners experience difficulties with applying the recommendations of the current guidelines if patients do not achieve target levels with three different blood pressure lowering drugs.

A clear, easy to follow and stepwise work-up strategy for the management of ‘uncontrolled’ hypertension in primary care is therefore urgently needed.

Objective:
To investigate whether application of a stepwise work-up strategy in primary care patients with uncontrolled hypertension results in better BP control.

Study design:
A cluster-randomised controlled trial among 40 general practices. “care as usual” vs. “a protocolised stepwise work-up”.

Study population:
240 adults aged ≥ 18 years and ≤ 80 years with uncontrolled office BP >140/90 mmHg despite being prescribed three or more BP lowering drugs for at least three months in an adequate dose.

Hollander M et al. STEPWISE treatment of uncontrolled HyperTension in primary care: A cluster randomised trial
Step 1: Blood pressure measurements

- The first step comprises a 24-hour BP to establish that the BP is still above target level. It helps to rule out a white coat effect.

- When the 24-hour BP is > 130/80 mmHg, patients will be considered to be “uncontrolled” and will proceed to step 2.

- Suriname: 2x morning & 2x late evening, for 1 week at home
## Thuismeting

### Formulier voor bloeddrukmeting thuis

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**Totaal**

| Gemiddelde bloeddruk |          |
Step 2 a comprehensive assessment of lifestyle:

• office blood pressure measurement will take place

• questionnaires (considering overweight, blood pressure raising factors, physical activity and salt intake) filled out by the patient will be discussed.

• During this step it is important to have enough time planned for the consultation.
Step 3: Adherence to medication

20% all prescribed medication was taken, 20% took none of the drugs, and 60% took only a part of the prescribed medication.

- **Unintentional non-adherence** occurs when a patient finds it difficult to schedule, administer or remember the treatment, or lacks the capacity to self-manage the medication.

- **Intentional non-adherers** actively choose not to follow treatment recommendations. Factors include poor motivation, adverse effects, perceived lack of effect, regimen complexity, being asymptomatic, individual perceptions and poor health literacy.

Step 4: Assessment of medication and adjustment if indicated.

- Factors like preferences, side effects, contraindications, interactions and adherence problems taken into account

- Keep in mind that 3 times half a dosage has more effect and often less adverse effects than twice the highest dosage.

- Frequently used triple therapy contains a diuretic, a calcium channel antagonist combined with either an ACE inhibitor or an angiotensin receptor blocker.

Veroudering in hoge bloeddruk context: 50 en 60 jaar, gebaseerd op de daling in de renine activiteit tijdens deze decade

Black patients are those of African or Caribbean descent, and not mixed-race, Asian or Chinese patients

Abbreviations:
A = ACE inhibitor (consider angiotensin-II receptor antagonist if ACE intolerant)
C = calcium-channel blocker
D = thiazide-type diuretic

NICE/ BHS algorithm/ Pathway 2

Ongecompliceerde hypertensie

Younger than 55 years
A
A+C or A+D
A+C+D

55 years or older or black patients of any age
C or D
A+C+D

Step 1
Step 2
Step 3
Step 4

A+C+D
+ Spironolactone
Step 5: Referral

- If the BP is still uncontrolled after the first four steps, the participant will be referred to a (vascular) internist.
Primary Healthcare Suriname: Are we ready for this?

Stepwise in Su: What are the possibilities?

Multidisciplinary: Stepwise screening via OSS?
Take Home

• Plan enough time for Lifestyle and BP management

• Keep in mind that 3 times half a dosage has more effect and often less adverse effects than twice the highest dosage.

• Add Spironolactone if triple therapy resistant

Bedankt!