

# Hypertension Management Protocol

Measure blood pressure (BP) of **all adult patients**

**Step 1**

If BP  $\geq$  140 or  $\geq$ 90<sup>1</sup>

**Start amlodipine 5 mg<sup>2</sup> once daily + statin in eligible patients**

**Step 2**

Review after 1-4 weeks, if BP still high

**Increase to amlodipine 10 mg<sup>2</sup> once daily**

**Step 3**

Review after 1-4 weeks, if BP still high

**Add losartan 50 mg  
Continue amlodipine 10 mg  
once daily**

**Step 4**

Review after 1-4 weeks, if BP still high

**Add hydrochlorothiazide 12.5mg  
Continue amlodipine 10mg and  
losartan 50mg once daily**

**Step 5**

Review after 4 weeks, if BP still high

**Check that patient has been taking drugs regularly and correctly. If this is the case, refer patient to a specialist.**

1 If  $\geq$ 160/100, start same day and consider initiating 10 mg of amlodipine daily. If SBP 140–159 or DBP 90–99, check on a different day and if still elevated, start.

2 Elderly, fragile patients should be started on 2.5 mg per day.

## Provision for Special Populations

### Pregnant women and women who may become pregnant

**DO NOT GIVE** losartan or hydrochlorothiazide to pregnant women nor to women of childbearing age who are not on effective contraception.

### Diabetic patients

Treat according to protocol including statin for all patients with both diabetes and hypertension.

### Heart attack in past 3 years

Add beta blocker to amlodipine with initial treatment.

### Heart attack or stroke, ever

Begin low-dose aspirin (75 mg) and statin.

### Chronic kidney disease with heavy proteinuria

ACE inhibitor or ARB preferred if close clinical and biochemical monitoring is possible.

### Statin recommendation

Start atorvastatin 20 mg for HTN plus:

- Diabetes—age 40 or older
- Smoker—age 50 or older
- All—age 60 or older
- Any age with previous heart attack, stroke, total cholesterol  $\geq$  8mmol/L or LDL cholesterol  $\geq$  5 mmol/L

## Advice for lifestyle modification for all patients



Stop all tobacco use, avoid second-hand tobacco smoke, and avoid unhealthy alcohol intake.



Eat a low salt diet (under 1tsp/day)



Increase physical activity to equivalent of brisk walk 150 minutes per week.

If overweight, lose weight.

Eat 5 servings of fruits and vegetables per day.

Eat nuts, legumes, whole grains and foods rich in potassium.

Eat fish at least twice per week.

Use healthy oils like sunflower, flax seed, soybean, peanut and olive.

Limit red meat to once or twice per week.

Avoid added sugar.

Limit consumption of fried foods and foods with high amounts of saturated fats.

# Hypertension Management Protocol

Measure blood pressure (BP) of **all adult patients**

**Step 1**

If BP  $\geq 140$  or  $\geq 90$ <sup>1</sup>

Start amlodipine 5 mg<sup>2</sup> once daily + statin in eligible patients

**Step 2**

Review after 1-4 weeks, if BP still high

Increase to amlodipine 10 mg<sup>2</sup> once daily

**Step 3**

Review after 1-4 weeks, if BP still high

Add losartan 50 mg  
Continue amlodipine 10 mg once daily

**Step 4**

Review after 1-4 weeks, if BP still high

Add hydrochlorothiazide 12.5mg  
Continue amlodipine 10mg and losartan 50mg once daily

**Step 5**

Review after 4 weeks, if BP still high

Check that patient has been taking drugs regularly and correctly. If this is the case, refer patient to a specialist.

1 If  $\geq 160/100$ , start same day and consider initiating 10 mg of amlodipine daily. If SBP 140–159 or DBP 90–99, check on a different day and if still elevated, start.

2 Elderly, fragile patients should be started on 2.5 mg per day.

## Provision for Special Populations

### Pregnant women and women who may become pregnant

**DO NOT GIVE** losartan or hydrochlorothiazide to pregnant women nor to women of childbearing age who are not on effective contraception.

### Diabetic patients

Treat according to protocol including statin for all patients with both diabetes and hypertension.

### Heart attack in past 3 years

Add beta blocker to amlodipine with initial treatment.

### Heart attack or stroke, ever

Begin low-dose aspirin (75 mg) and statin.

### Chronic kidney disease with heavy proteinuria

ACE inhibitor or ARB preferred if close clinical and biochemical monitoring is possible.

### Statin recommendation

Start atorvastatin 20 mg for HTN plus:

- Diabetes—age 40 or older
- Any age with previous heart attack, stroke, total cholesterol  $\geq 8$ mmol/L or LDL cholesterol  $\geq 5$  mmol/L

## Advice for lifestyle modification for all patients



Stop all tobacco use, avoid second-hand tobacco smoke, and avoid unhealthy alcohol intake.



Eat a low salt diet (under 1tsp/day)



Increase physical activity to equivalent of brisk walk 150 minutes per week.

If overweight, lose weight.

Eat 5 servings of fruits and vegetables per day.

Eat nuts, legumes, whole grains and foods rich in potassium.

Eat fish at least twice per week.

Use healthy oils like sunflower, flax seed, soybean, peanut and olive.

Limit red meat to once or twice per week.

Avoid added sugar.

Limit consumption of fried foods and foods with high amounts of saturated fats.

# Hypertension Management Protocol

Measure blood pressure (BP) of **all adult patients**

**Step 1**

If BP  $\geq 140$  or  $\geq 90$ <sup>1</sup>

**Start amlodipine 5 mg<sup>2</sup> once daily + statin in eligible patients**

**Step 2**

Review after 1-4 weeks, if BP still high

**Increase to amlodipine 10 mg<sup>2</sup> once daily**

**Step 3**

Review after 1-4 weeks, if BP still high

**Add telmisartan 40 mg Continue amlodipine 10 mg once daily**

**Step 4**

Review after 1-4 weeks, if BP still high

**Add hydrochlorothiazide 12.5mg Continue amlodipine 10mg and telmisartan 40mg once daily**

**Step 5**

Review after 4 weeks, if BP still high

**Check that patient has been taking drugs regularly and correctly. If this is the case, refer patient to a specialist.**

1 If  $\geq 160/100$ , start same day and consider initiating 10 mg of amlodipine daily. If SBP 140–159 or DBP 90–99, check on a different day and if still elevated, start.

2 Elderly, fragile patients should be started on 2.5 mg per day.

## Provision for Special Populations

### Pregnant women and women who may become pregnant

**DO NOT GIVE** losartan or hydrochlorothiazide to pregnant women nor to women of childbearing age who are not on effective contraception.

### Diabetic patients

Treat according to protocol including statin for all patients with both diabetes and hypertension.

### Heart attack in past 3 years

Add beta blocker to amlodipine with initial treatment.

### Heart attack or stroke, ever

Begin low-dose aspirin (75 mg) and statin.

### Chronic kidney disease with heavy proteinuria

ACE inhibitor or ARB preferred if clinical and biochemical monitoring is possible.

### Statin recommendation

Start atorvastatin 20 mg for HTN plus:

- Diabetes—age 40 or older
- Smoker—age 50 or older
- All—age 60 or older
- Any age with previous heart attack, stroke, total cholesterol  $\geq 8$ mmol/L or LDL cholesterol  $\geq 5$  mmol/L

## Advice for lifestyle modification for all patients



Stop all tobacco use, avoid second-hand tobacco smoke, and avoid unhealthy alcohol intake.



Eat a low salt diet (under 1tsp/day)



Increase physical activity to equivalent of brisk walk 150 minutes per week.

If overweight, lose weight.

Eat 5 servings of fruits and vegetables per day.

Eat nuts, legumes, whole grains and foods rich in potassium.

Eat fish at least twice per week.

Use healthy oils like sunflower, flax seed, soybean, peanut and olive.

Limit red meat to once or twice per week.

Avoid added sugar.

Limit consumption of fried foods and foods with high amounts of saturated fats.

# Hypertension Management Protocol

Measure blood pressure (BP) of **all adult patients**

**Step 1**

If BP  $\geq 140$  or  $\geq 90$ <sup>1</sup>

**Start amlodipine 5 mg<sup>2</sup> once daily + statin in eligible patients**

**Step 2**

Review after 1-4 weeks, if BP still high

**Increase to amlodipine 10 mg<sup>2</sup> once daily**

**Step 3**

Review after 1-4 weeks, if BP still high

**Add telmisartan 40 mg  
Continue amlodipine 10 mg once daily**

**Step 4**

Review after 1-4 weeks, if BP still high

**Add hydrochlorothiazide 12.5mg  
Continue amlodipine 10mg and telmisartan 40mg once daily**

**Step 5**

Review after 4 weeks, if BP still high

**Check that patient has been taking drugs regularly and correctly. If this is the case, refer patient to a specialist.**

<sup>1</sup> If  $\geq 160/100$ , start same day and consider initiating 10 mg of amlodipine daily. If SBP 140–159 or DBP 90–99, check on a different day and if still elevated, start.

<sup>2</sup> Elderly, fragile patients should be started on 2.5 mg per day.

## Provision for Special Populations

### Pregnant women and women who may become pregnant

**DO NOT GIVE** losartan or hydrochlorothiazide to pregnant women nor to women of childbearing age who are not on effective contraception.

### Diabetic patients

Treat according to protocol including statin for all patients with both diabetes and hypertension.

### Heart attack in past 3 years

Add beta blocker to amlodipine with initial treatment.

### Heart attack or stroke, ever

Begin low-dose aspirin (75 mg) and statin.

### Chronic kidney disease with heavy proteinuria

ACE inhibitor or ARB preferred if close clinical and biochemical monitoring is possible.

### Statin recommendation

Start atorvastatin 20 mg for HTN plus:

- Diabetes—age 40 or older
- Any age with previous heart attack, stroke, total cholesterol  $\geq 8$ mmol/L or LDL cholesterol  $\geq 5$  mmol/L

## Advice for lifestyle modification for all patients



Stop all tobacco use, avoid second-hand tobacco smoke, and avoid unhealthy alcohol intake.



Eat a low salt diet (under 1tsp/day)



Increase physical activity to equivalent of brisk walk 150 minutes per week.

If overweight, lose weight.

Eat 5 servings of fruits and vegetables per day.

Eat nuts, legumes, whole grains and foods rich in potassium.

Eat fish at least twice per week.

Use healthy oils like sunflower, flax seed, soybean, peanut and olive.

Limit red meat to once or twice per week.

Avoid added sugar.

Limit consumption of fried foods and foods with high amounts of saturated fats.