

ASSESSING AND MANAGING MUSCLE SYMPTOMS IN PEOPLE TAKING STATINS

Use this Action Plan to systematically assess whether muscle symptoms are likely to be statin-related.

Muscle pain and weakness are perceived as common side effects of statin therapy,^{1,2} and have been reported as key reasons for non-adherence and discontinuation.²⁻⁴ Poor adherence can stop at-risk patients from achieving lipid targets, and has been linked with poor cardiovascular outcomes.^{2,3}

Although muscle complaints are common among people receiving statin therapy in practice (7%– 29%),^{1,5,6} randomised controlled trial results suggest the true incidence of statin-associated muscle symptoms (SAMS) may not be so high (1%–5%).^{3,6,7} Muscle symptoms are subjective, and currently there are no validated clinical tests or diagnostic criteria for SAMS.^{3,8,9}

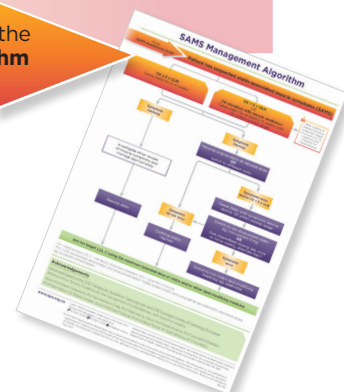
Take a systematic approach

Use the guide below to determine the likelihood of statins as the cause of reported muscle symptoms.^{3,6,10}

SAMS Assessment Guide

SAMS LESS LIKELY			SAMS MORE LIKELY	
Unilateral Non-specific distribution Tingling, twitching, shooting pain, nocturnal cramps or joint pain	Nature of symptoms	Bilateral Large muscle groups (eg, thighs, buttocks, calves, shoulder girdle) Muscle ache, weakness, soreness, stiffness, cramping, tenderness or general fatigue		
Onset before statin initiation Onset > 12 weeks after statin initiation	Timing of symptoms	Onset 4–6 weeks after statin initiation Onset after statin dosage increase		
Non-statin causes of muscle symptoms including: <ul style="list-style-type: none"> • conditions eg, hypothyroidism, polymyalgia rheumatica • vitamin D deficiency • unaccustomed/heavy physical activity • medicines eg, glucocorticoids, antipsychotics, immunosuppressant or antiviral agents 	Other considerations	Risk factors for SAMS including: <ul style="list-style-type: none"> • medicine or food interactions • high-dose statin therapy • history of myopathy with other lipid-modifying medicines • regular vigorous physical activity • impaired hepatic or renal function • substance abuse (eg, alcohol, opioids, cocaine) • female • low BMI 		
	CK levels	Elevated (> ULN; but may also be normal) Elevated CK levels decrease after statin ceased		

If SAMS is likely, proceed to the **SAMS Management Algorithm** at nps.org.au/sams



Discuss symptoms and address any concerns about statin benefits and potential harms.

Successful management of suspected SAMS requires a collaborative process that involves assessing muscle symptoms, eliminating contributing factors, and in some cases trying alternative statins and doses, or prescribing alternative lipid-lowering medicines.^{2,3,6,8} Many patients can tolerate intermittent dosing with the same statin, and around 90% can tolerate a different statin.^{3,6,11}

References available at nps.org.au/statins-action-plan-refs

Staying on track with your statin

Muscle aches and pains can happen while taking a statin, but this does not necessarily mean that the statin is the cause. Muscle aches and pains also happen in people who are not taking statins. Work through this plan with your health professional to better understand what might be causing your muscle aches and pains and what you can do to help manage them.

Why are statins important?

Statins are effective and well-tolerated medicines commonly prescribed to lower 'bad' cholesterol levels in the blood and to reduce the chance of heart attack and stroke in people at high risk.

Statins are taken by millions of people in Australia every day and have many decades of research supporting their use.

If you are concerned about possible side effects from your statin, speak with your health professional.

Is a statin causing my symptoms?

Like all medicines, statins can cause side effects in some people. In general, these are mild and temporary.

Muscle aches and pains are the most common side effects reported by people taking statins. However, the true number of cases that result from taking the medicine remains unclear, partly because non-specific muscle symptoms become more common among people aged 50 and older.

In carefully controlled studies, similar numbers of people felt muscle aches and pains, whether they were taking a statin or a placebo (a 'sugar' pill).

Evidence shows that many people who experience muscle symptoms can keep taking their statin at a lower dose, and up to 90% are able to tolerate a different statin, without problems.

What will my doctor do?

Your doctor has assessed your symptoms, to see how likely it is that your statin is the cause. If a statin is suspected, they will need to follow some steps to get a clearer picture of your symptoms and to confirm if the medicine is the cause.

My Action Plan

An important part of managing your condition is to work with your doctor on a plan that looks after your heart health while reducing your symptoms.

Some people may need to stop statin therapy temporarily or take a different cholesterol medicine. Do not stop or change the way you are taking your statin unless instructed by your doctor, otherwise you could be putting yourself at risk of a heart attack or stroke.

When you return home, remember to track your symptoms. This information will help your doctor to better understand what could be causing your muscle symptoms.

Agreed actions

- Continue my statin as usual
- Go for a blood test
- Continue my statin, at a reduced dose _____
- Stop my statin for _____ weeks
- Track my symptoms
- Other _____

Date of my next visit: _____

For more information about medicines or side effects call Medicines Line on **1300 MEDICINE**. Visit nps.org.au/statins