

Low-dose oral minoxidil information

What is minoxidil?

Minoxidil is an old blood pressure medication that is sometimes used to treat resistant hypertension. A notable side effect of minoxidil is hair growth, and this led to its development as a topical hair loss treatment; it is the active ingredient in Rogaine®. At doses used for hypertension (≥ 10 mg/day), oral minoxidil can have some significant side effects, but low-dose minoxidil (≤ 5 mg/day) has been shown to be well-tolerated while maintaining its hair-stimulating properties.

How does minoxidil promote hair growth?

The mechanism by which minoxidil promotes hair growth is not entirely understood, but the prevailing theory is that it works by opening potassium channels in hair follicles, thus prolonging the anagen phase of hair growth.

How is low-dose minoxidil given?

Low-dose minoxidil is dosed as 5 mg/day or less. Minoxidil comes in 2.5 and 10 mg tablets. A reasonable starting dose is 1.25 mg (half tablet) to 2.5 mg once daily. Minoxidil should be taken at bedtime, as this may help to prevent symptoms of orthostatic hypotension (low blood pressure when standing).

What are the side effects of minoxidil?

At hypertensive doses (≥ 10 mg/day), minoxidil can have some significant side effects. Low-dose minoxidil, however, has been well tolerated in studies. Possible side effects of minoxidil include the following:

- Hypertrichosis (excessive hair growth) - hypertrichosis occurred in 27 - 93% of patients in low-dose trials. Affected areas include the forearms, forehead, temples, and cheekbone areas.
- Swelling of the feet and ankles - 4 to 10% of patients in low-dose trials experienced lower extremity swelling
- Increase in heart rate - in low-dose trials, the average heart rate was either unchanged or slightly increased
- Orthostatic hypotension (low blood pressure when standing) - orthostatic hypotension occurred in 0 to 7% of patients in low-dose trials
- Decrease in blood pressure - in low-dose trials, average blood pressure was unchanged

Conditions where low-dose minoxidil should not be taken

- Any condition where fluid retention is an issue (e.g. heart failure, liver disease, kidney failure)
- Pheochromocytoma

How long can I take low-dose minoxidil?

Low-dose minoxidil may be taken for as long as desired

Minoxidil drug interactions

- Blood pressure medications - minoxidil is a vasodilator, and it may potentiate the effects of blood pressure medications. In low-dose trials, minoxidil did not significantly affect blood pressure. If you are taking blood pressure medications, you should monitor your blood pressure after starting low-dose minoxidil and report any significant changes to your provider.