

Title: The Diabetic Foot...A foot ulcer guide for diabetics and tips for healthy feet

Author: James McCabe

Date: July 16, 2008

Key words: Diabetes, Diabetic Foot, Hemoglobin A1C

Abstract:

A major complication of diabetes is foot ulcer. This patient education tool uses specific clinical characteristics to determine a diabetic's risk for getting a diabetic foot ulcer over the next 10 years. Tips on how to prevent foot ulcers and how to maintain healthy feet are included. Also referenced are multiple websites that overview diabetes, diabetic foot ulcers and prevention tips in both English and Spanish.

This document was created by a medical student enrolled in the Primary Care Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up to date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.

What ***you*** can do to prevent foot ulcers*

- ☑ Keep your diabetes under control: an A1C less than 7 is your goal!
Talk to your doctor on how to achieve this!

- ☑ Keep your feet healthy: wash (with warm water), dry and apply skin cream daily. Don't let them get too hot or cold and never walk around barefoot!

- ☑ Cut your nails straight across.

- ☑ Footwear: Wear good, comfortable shoes with socks to avoid rubbing. Avoid sandals, flip-flops or any open-toed shoes.

- ☑ Change your socks and alternate your shoes every day.

- ☑ Tell your doctor about any cut, blister, corn, callus or change in feeling in your feet.

*Recommendations taken from the American Diabetes Association and American Academy of Family Physicians

For more information on how to protect your feet:

For a great review of diabetes and your foot care:
<http://www.nlm.nih.gov/medlineplus/diabetefoot.html>

For great steps on how to care for your feet:
<http://familydoctor.org/online/famdocen/home/common/diabetes/living/352.html>

http://ndep.nih.gov/campaigns/Feet/Feet_overview.htm

For current research on the subject:
<http://www.diabetes.org/diabetes-research/summaries/singh-ulcers.jsp>

<http://care.diabetesjournals.org/cgi/content/full/29/6/1202>

En español:
<http://familydoctor.org/online/famdoces/home/common/diabetes/living/352.html>

http://www.ndep.nih.gov/campaigns/Feet/Feeet_overview_Hisp.htm

And make sure to talk with your doctor!

James McCabe, MS4
University of Minnesota
Medical School

The Diabetic Foot



A foot ulcer guide for diabetics

Tips for healthy feet

Why do diabetics get foot ulcers?

- Diabetes increases your blood sugar. This hurts your nerves and blood vessels (arteries and veins)- especially in your feet.
- Over time, hurt nerves stop working like normal. Without good nerves you can't feel your feet normally.
- Damaged blood vessels can't give your feet the proper nutrition (food) they need.
- If you can't feel your feet and they are not getting good nutrients, little cuts and sores can quickly become ulcers.

Why are ulcers bad?

- Ulcers in diabetics don't heal quickly. Often, they need weeks to heal. Sometimes they never heal.
- This leads to a higher chance of getting a bad infection.
- This can lead to chronic (lifelong) foot problems or even amputation.

A typical looking foot ulcer in a diabetic:



What is your risk for a foot ulcer?

To figure out, follow these three steps...

Step 1: Answer the following questions

What is your A1C number?
(if you don't know ask your doctor.)

Do you have any of the following?

▫ Loss of feeling in either of your feet? Y / N

▫ Poor vision (worse than 20/40)? Y / N

▫ Really hard yellow toenails also called onychomycosis (see picture)? Y / N



▫ A previous foot ulcer? Y / N

▫ Foot that was amputated (removed)? Y / N

Total Yes =

*If you have had an ulcer or amputation previously please make sure to discuss foot care with your doctor.

Step 2: Figure out your risk

Low Risk

- A1C less than 15 with 0 Yes answers OR
- A1C less than or equal to 7 with 1 Yes answer

Medium Risk

- A1C greater than 7 with 1 Yes answer OR
- A1C less than or equal to 7 with 2 or more Yes answers

High Risk

- A1C greater than 7 with 2 Yes answers

Very High Risk

- A1C greater than 7 with 3+ Yes answers

An Example: If my A1C is 8.4 and I have poor vision (1 yes answer) my risk is...**Medium**

Step 3: Use your risk to see your chance for a foot ulcer at 1, 5 and 10 years*

	1 year	~ 5 years	~10 years
Low	1-2%	2-3%	>5%
Medium	2-3%	5%	~25%
High	4-5%	~20%	~40%
Very High	6%	>45%	>60%

*These are best estimates