

COVER STORY

DIABETES:

preventable and treatable

Number of cases is rising in Kentucky and across nation

By Jennifer E. Kustes
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Diabetes used to be defined by age as much as by its effect on the body. However, with more children and young adults being diagnosed with the type of diabetes that used to show up almost exclusively in older adults, a change of terminology has occurred.

The two types of diabetes used to be referred to as juvenile and adult onset. With the increasing obesity of children and young adults, what used to be adult onset diabetes is appearing earlier, blurring the age differences between the two types. Thus, they are now called Type I and Type II diabetes.

Type I diabetes occurs when the body does not make insulin at all. Type II happens when the body produces insulin, but it may not be enough or the body may not be using it properly.

How bad is it?

The number of diagnosed cases of diabetes in Kentucky and nationwide is rising. Type II diabetes is much more common than Type I. Nine out of 10 diabetics have Type II.

Kentucky ranks seventh in the nation for the highest percentage of the adult population diagnosed with diabetes. There were 267,000 diagnosed cases based on the 2003 Census population estimate, according to the Kentucky Cabinet For Health and Family Services.

Kentucky is not alone; the number of cases doubled in 23 states, according to the Centers for Disease Control. Nationwide, 18.2 million people had diabetes in 2002, according to the CDC.

But the problem is worse than that. "We know there's a huge number that are undiagnosed," said Ava Eaves, registered dietitian at Pattie A. Clay Regional Medical Center.



A lancet is used by a nurse to draw blood from diabetic Carla Faulkner's finger. The drawn blood goes into a meter to determine blood sugar. NANCY TAGGART / THE REGISTER

It is estimated that 29 percent of cases are undiagnosed, which means that an additional 109,000 Kentucky adults may have undiagnosed diabetes. The nationwide statistic includes an estimated 5.2 million undiagnosed cases.

Many cases go undiagnosed because a lot of people don't go to the doctor, or if the doctor tells them they are prediabetic, they get scared and don't go back, Eaves said.

Kentucky's number of diagnosed diabetics might be high because more doctors look for it, Eaves said.

"There's a genetic pool here," and inactivity and unhealthy eating habits also are reasons doctors look for diabetes, she said.

Complications

To be diagnosed as a diabetic, a person's blood sugar must be above 126. Normal blood sugar is between 70 and 110. People who fall between 110 and 126 are considered prediabetic.

Diabetes is a progressive disorder, and it often brings on other problems.

"The longer you go with elevated glucose, the more risk of complications," Eaves said.

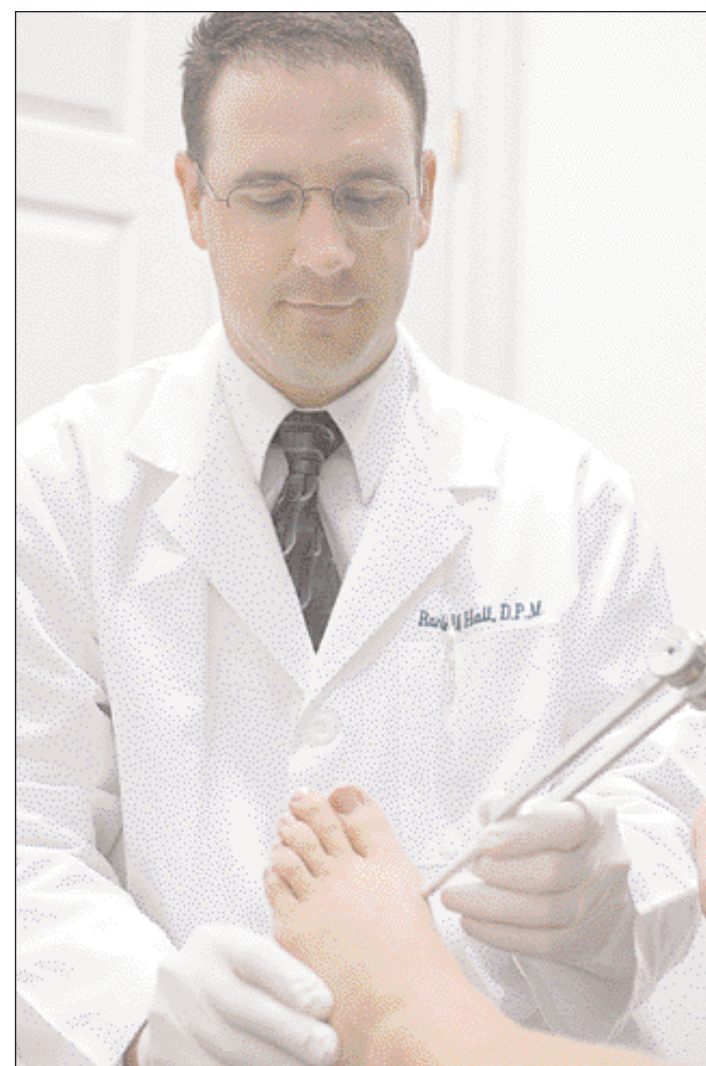
Complications often begin about 10 years after diagnosis of diabetes, Eaves said. Even with good glucose control, you run the risk of complications, but you can decrease them.

Diabetics are two to four times more likely to have heart disease, and many diabetics have high cholesterol and high blood pressure.

Diabetes is the leading cause of blindness. Eye problems occur in diabetics because there are many small blood vessels in the eyes. High blood pressure can stiffen them, and they can rupture.

Eaves recommends an annual dilated eye exam.

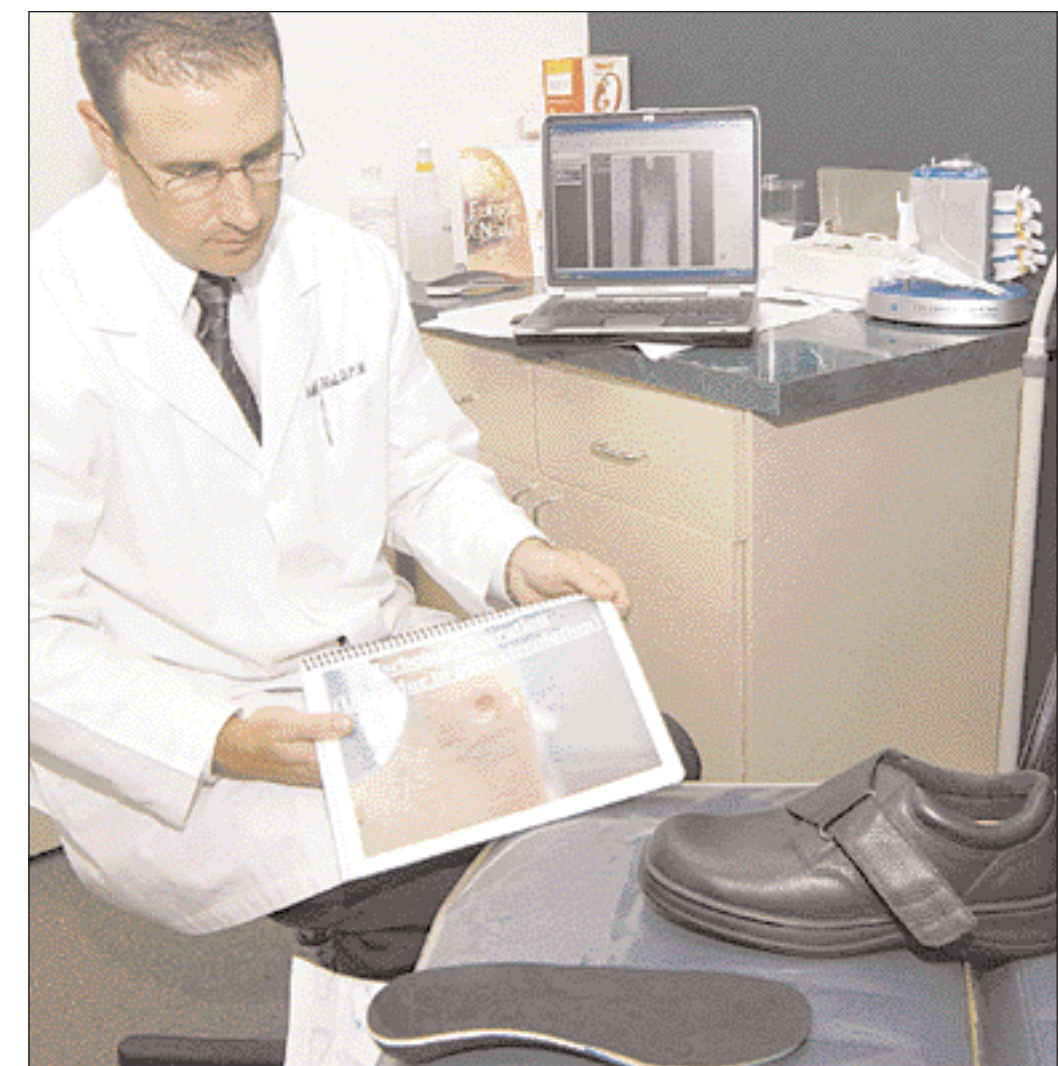
Diabetics also have foot problems, which can lead to amputations. The feet are the



LEFT: Richmond podiatrist Randall Hall examines a diabetic patient's foot.

RIGHT: Hall displays a picture of an ulcer on a diabetic's foot and a specially made diabetic shoe insole and shoe.

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farthest away from the heart, and diabetes affects the circulation in many of the small blood vessels there, according to Randall Hall, a podiatrist in Richmond.

If a diabetic gets a cut on their feet, they don't heal as well, which can lead to infections, Hall said.

With high blood sugar, the nerve cells also deteriorate, which can cause reduced feeling or numbness in the feet. A diabetic can easily burn their feet, Hall said. They can put their feet in what they think is just warm water, when it is actually scalding water. They also can put their feet too close to a heater and get severe burns.

Solutions and prevention

Diabetes can be delayed or prevented.

"We have not done a good job as a society in prevention. We do a fabulous job with treatment, but we lag behind in prevention," Eaves said.

"The consensus is that if you have a healthy lifestyle, you can reduce your risk or delay the onset until later," Eaves said. "A lot of physicians, once they know there's a family history, they will keep a much closer eye on those areas."

There are many treatment options for both types of diabetes. Type I diabetics are insulin dependent. The most common method of giving insulin is by injection. There also are pumps available that deliver a



Kim Richards, right, a pharmacist at Pattie A. Clay Regional Medical Center, counsels diabetic Carla Faulkner about her medication, glyburide, which helps the body break down sugar and use its natural insulin more efficiently.

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sustained dose of insulin into the fatty tissue. Physicians also are experimenting with an inhalable insulin and an oral pill that is coated so it cannot be digested.

For Type II diabetics, many physicians will try to get the patient to change diet and lifestyle habits, then add oral medications as needed. Some pills target the production of insulin, and some help the body use insulin more effectively. Many Type II diabetics

progress to being insulin dependent.

However, "If you manage it and take care of yourself, the outcome is very positive," Eaves said.

"If you have diabetes, it doesn't mean you are going to have amputations," Hall said. They can be prevented if a patient follows diabetic foot care instructions and has their primary care physician check their feet regularly.

With management of diabetes, vision loss can be reduced by 50 to 60 percent and foot amputations by 50 percent. If cholesterol is kept under control, 25 to 50 percent of vascular complications can be reduced.

"Diabetes is an overall body problem," Hall said. "The main thing is catching things early."

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