

Diabetes-linked amputations declining, study finds

July 19 2013, by Marijke Vroomen Durning, Healthday Reporter



Although disease rates are rising, orthopedic treatments have improved, experts say.

(HealthDay)—Fewer foot and leg amputations are being performed on people with diabetes, even as rates of the disease are rising in the United States, a new study finds.

Drastic [diabetes](#)-related [amputations](#) were cut by nearly half over the past decade, researchers report in the July issue of the journal *Foot & Ankle International*.

Because of long-term nerve damage, people with diabetes face up to a 25 percent lifetime risk of amputation, according to prior research. For this study, researchers reviewed Medicare claims from 2000 to 2010 to see who had leg, feet and toe amputations and why.

The results surprised them. "The trend was so clear and more obvious than I thought it would be," said senior author Dr. Phinit Phisitkul, an assistant clinical professor at the University of Iowa department of orthopedics and rehabilitation.

The rate for upper and lower leg amputations fell 47 percent among people with diabetes over the decade, and the rate of lower extremity amputations alone declined about 29 percent during that time period.

Only partial toe amputations, which have less impact on quality of life, rose during that time period—by 24 percent. Orthopedic treatments for diabetic foot ulcers, which the authors also analyzed, rose 143 percent, the study found.

Phisitkul said it's impossible to pinpoint a specific reason for the drop in major amputations. "We do know that better foot and ankle treatment is a part of it though," he said.

Also, health care teams are doing more to manage diabetic ulcers and to prevent them from occurring in the first place, he said.

Surgery that releases (lengthens) the Achilles tendon and calf muscles and a technique called contact casting reduce the pressure on certain parts of the foot that are prone to developing ulcers.

Almost 26 million people in the United States have diabetes, and the overwhelming majority have type 2, which is associated with being overweight and sedentary. Based on current projections, the number of diabetics will reach 44 million within the next 20 years, putting them at risk of serious illness and complications, including amputations.

Amputations among people with diabetes happen because they do not produce any or enough of the hormone insulin to properly convert food

into energy. The result is too much sugar in the blood, which in turn causes nerve damage that can reduce feeling in the feet, leading to the development of sores or ulcers.

If these ulcers become severely infected, life-saving amputation may be needed. Some people lose one or two toes or the edge of the foot, but others require more drastic measures, such as above-the-knee amputation.

Dr. Joel Zonszein, director of the Clinical Diabetes Center at Montefiore Medical Center in New York City, said the United States lags behind other countries in terms of diabetes foot care.

"I have traveled around South America and Europe to see how they manage patients with diabetic feet," Zonszein said. "They seem to be doing much better than we are. Although it doesn't happen everywhere in those countries, experts there generally treat patients with a diabetic foot much more aggressively and are much more up-to-date than we are here."

In the United States, many insurance companies won't cover prevention of diabetic foot problems, Zonszein explained. There is evidence that contact casting can help, but since many payers won't reimburse the costs for the procedure, few doctors use it, he said.

"This is a typical case where spending a little bit of money would prevent a lot of expenses later for Medicare—in transportation, wheelchairs, and disability for the patients," Zonszein said.

Teaching proper foot care is also an important aspect of preventing ulcers from occurring, but this also falls under the realm of prevention, which isn't paid for, Zonszein said. Instead, "[payers] pay for complications and amputations," he noted.

With proper treatment, only 30 percent of ulcers recur, said Phisitkul. Doctors can still reduce this another 14 percent with better treatment, he added.

While surgical interventions and contact casting help reducing foot ulcers and subsequent higher level amputations, patients must play a role in prevention as well, said Phisitkul.

"Patients with diabetes have to do their best to control their blood sugar. They need to seek care from their primary care doctor, get treatment, and discuss potential surgeries [like tendon release] to help improve their feet," Phisitkul said.

Diabetes is a silent disease but it eats away at the body, Phisitkul added. "Patients need to try to fight against diabetes sooner than later, rather than waiting for complications to begin," he said.

More information: For more on diabetes complications, head to the [American Diabetes Association](#).

[Health News](#) Copyright © 2013 [HealthDay](#). All rights reserved.

Citation: Diabetes-linked amputations declining, study finds (2013, July 19) retrieved 10 April 2024 from <https://medicalxpress.com/news/2013-07-diabetes-linked-amputations-declining.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
