Diabetic foot problems and treatments

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Foot problems are a leading cause of hospitalisation for the people who have been identified as having diabetes mellitus. Common problems include infection, ulceration, or gangrene that may lead, in severe cases, to amputation of a toe, foot or leg.

Most of these problems are preventable through proper care and regular visits to your podiatric surgeon. This physician can provide information on foot inspection and care, proper footwear, and early recognition and treatment of foot conditions.

Why do I have to worry more about my feet?

People with diabetes often have trouble with their feet. Part of the problem is that the loss of feeling in your feet makes it hard for you to tell if you have a blister or sore. If little sores are not taken care of, they can get worse and turn into ulcers (serious, deep sores). If these ulcers become infected, you may have to go to the hospital or, in very serious cases, have a foot amputated (removed). This handout will give you some tips on how to care for your feet.

Foot problems in persons with diabetes are usually the result of three primary factors: neuropathy, poor circulation, and decreased resistance to infection. Also, foot deformities and trauma play major roles in causing ulcerations and infections in the presence of neuropathy or

Neuropathy (Nerve Damage): Your ability to detect sensations or vibration may be diminished. Neuropathy allows injuries to remain unnoticed and untreated for lengthy periods of time. It may cause burning or sharp pains in feet and interfere with your sleep. Ironically, painful neuropathy may occur in combination with a loss of sensation. Neuropathy can also affect the nerves that supply the muscles in your feet and legs. This 'motor neuropathy' can cause muscle weakness or loss of tone in the thighs, legs, and feet, and the development of hammertoes, bunions, and other foot deformi-

Poor circulation: Persons with diabetes often have circulation disorders (peripheral vascular disease) that can cause cramping in the calf or buttocks when walking. The symptoms can progress to severe cramping or pain at rest, with associated color and temperature changes

(the feet may turn bright red when hanging down and constantly feel cold). Also, the skin may become shiny, thinned and easily damaged. A reduction in hair growth and a thickening of the toenails might also be present.

Poor circulation, resulting in reduced blood flow to the feet, restricts delivery of oxygen and nutrients that are required for normal maintenance and repair. Healing of foot injuries, infection or ulceration is affected. Peripheral vascular bypass operations

infection is unexplained high blood sugar, even without fever. The combination of fever and high blood sugar often warns of a severe infection requiring hospitalisation. Lesser degrees of infection are often treated on an outpatient basis.

Foot deformities: Foot deformities such as hammertoes, bunions, and metatarsal disorders have special significance in the diabetic population. Neuropathy places the foot at increased risk for developing corns, cal-

Ulcers of the foot: An ulceration or ulcer is usually a painless sore at the bottom of the foot or top of the toes, resulting from excessive pressure at that site. Ulcers frequently underlie a preexisting corn or callus that was allowed to build up too thickly. Trauma from heat, cold, shoe pressure, or penetration by a sharp object are also potential causes. Neuropathy allows the lesions to develop because the normal warning sense of pain has been lost and they go unrecogrelieve pressure on the area. When use of crutches, a wheelchair, or rest is not feasible, plaster casts, braces, healing sandals, or orthoses (special shoe inserts) can be used to protect the foot while it heals. If circulation is inadequate to allow healing, your podiatric surgeon may refer you to a vascular surgeon for appropriate evaluation and possible vascular reconstructive surgery.

Once an ulcer has healed, it is important to continue to see your podiatric surgeon regularly. Special footwear and inserts may be recommended to protect your feet and prevent new or recurrent lesions from developing.

Foot surgery in the diabetic patient

Realising the potential danger of foot deformities in the diabetic patient, corrective foot surgery is an option when you are in generally good health and have good circulation. Most deformities progressively worsen over time as do the effects of neuropathy and vascular or circulatory disease. When foot deformities cannot be managed effectively with conservative care, surgery may be indicated.

Podiatric surgery is often "same day" surgery under local anesthesia to minimise potential complications. In some cases, such as in the presence of an active ulceration, hospitalisation may be necessary to properly monitor your postoperative

Surgery may also be required to heal an ulceration or to eradicate some infections, especially those involving the bone. Your cooperation is an important part of your care. You must guard against injury and provide the daily care necessary to maintain the health of your feet.

Footwear guidelines

Shoes must always fit comfortably and have adequate width and depth for the toes. Leather shoes easily adapt to the shape of your feet and allow them to "breathe." Athletic shoes, jogging shoes and sneakers are usually excellent choices if they are well fitted and provide adequate cushioning. Your podiatric surgeon may recommend "extra depth" shoes, custom molded shoes to adapt to your particular needs, or orthoses to provide

cushioning and support. Always check your shoes for foreign objects or torn linings before putting them on. You should wear two or three pairs of shoes each day so that one pair is not worn for more than four to six

more of an unfolding process,

one in which the child learns, over

time, what she needs to know.

Questions should be answered

as they arise so that the child's

natural curiosity is satisfied as

If your child does not ask ques-

tions about sex, do not just ignore

the subject. At about age 5, you

can begin to introduce books that

approach sexuality on a develop-

mentally appropriate level. Par-

ents often have trouble finding

the right words, but there are a

number of excellent books to

the home be curtailed?

he/she matures.

hours. New shoes should be worn for only a few hours at a time, and you should take care to inspect your feet for any points of

vour shoes

Avoid wearing open-toed shoes or sandals until you have discussed this with your podiatric surgeon. Above all else, do not walk with bare feet.

λInspect your feet daily for

between your toes. your foot and heel.

warm, not as hot as you can stand it. (95°-100° Fahrenheit). λAvoid temperature extremes do not use hot water bottles or heating pads on your feet.

λWash your feet daily with warm. soapy water and dry them well, especially between the toes. λUse a moisturising cream or

between the toes. λDo not use acids or chemical

λDo not perform "bathroom

λContact your podiatric surgeon immediately if your foot becomes swollen or is painful, or if redness occurs. λDo not smoke.

λLearn all you can about diabetes and how it can affect your feet.

by your podiatric surgeon. How often will my doctor

check your feet periodically when you go in for a visit. If you are having any problems, such as loss of feeling, sores or ingrown toenails, tell your doctor right

While these are some of the most commonly prescribed treatments for diabetic foot problems, others may be used. The podiatric surgeon will determine which treatment is likely to be the

irritation. Socks should be well fitted

without seams or folds. They should not be so tight as to interfere with circulation. Well-padded socks can be very protective if there is an abundance of room in

Foot-care guidelines

blisters, bleeding, and lesions λUse a mirror to see the bottom of

λDo not soak your feet unless the

temperature of the water is luke-

lotion daily, but avoid getting it

corn removers.

surgery" on corns, calluses, or ingrown toenails.

λTrim your toenails carefully and file them gently. Have a podiatrist treat you regularly if you cannot trim them yourself without diffi-

λHave regular foot examinations

check my feet?

Your doctor or nurse should

most successful in each case.

Birth control pills do not cause weight gain!

Contrary to popular belief, the birth control pills do not cause most women to gain weight, U.S. and Dutch

researchers found. Ever since the pill was first introduced in the 1960s, women have complained it made them fat -- and generations have used it as an excuse for putting on a little padding.

But a team at Family Health International in Research Triangle Park in North Carolina and the University of Leiden found little evidence this was true.

"Health care providers can reassure women that substantial weight gains have not been demonstrated in women using combination hormonal contraceptives," they wrote in their report.

Maria Gallo of Family Health International and colleagues reviewed 42 separate trials of women on birth control pills or patches.

There were three trials that compared the real pill to a placebo in women, and none showed the women taking the actual hormones gained any more weight than women taking dummy pills.

In general the trials were hard to interpret, the researchers said. Many did not say how many women took part, while others did not give enough details to verify how accurate the results

And only one was specifically designed to tell whether the hormone-based pill caused women to gain weight, although several recorded weight in a system-

But if hormone-based birth control puts on pounds, it does not amount to much over a population, they said.

"Available evidence is insufficient to determine the effect of combination contraceptives on weight, but no large effect is evident," they wrote.

The researchers noted that women frequently stop taking the pill because they believe it makes them fat. One study found that weight gain was the most frequently cited reason for discontinuing oral contraception.

And, they said, it is plausible to believe that hormones could cause changes that would lead to weight gain. But they also noted that women tend to gain weight over time whether they are taking the pill or not.

The study was funded by the U.S. Agency for International Development and the National Institute of Child Health and Human Development.

Source: http://www.reuters.com

Nitrate for heart may damage the hip

Elderly women taking nitrate were significantly older than medications for a heart condition seem to be at heightened risk of developing hip osteoarthritis, according to researchers at the University of California at San Francisco.

Dr. Nancy E. Lane and colleagues note that as part of a 10-year study, they analyzed pelvic x-rays obtained when they enrolled nearly 6,000 white women aged 65 or older in the study, and again eight years later.

Information on whether the participants were using nitrate medication was obtained at years 6 and 8. A total of 343 (7 percent) of women reported such use on one or both occasions. Under-the-tongue nitrates accounted for more than 70 percent of the total nitrate

During follow up, 566 women developed new osteoarthritis in one or both hips, based on their x-rays. Lane's team reports in the medical journal Arthritis and Rheumatism. These women

women who did not show changes on their x-rays.

However, after taking in account their age, height, weight, bone mineral density and estrogen use, women who used nitrates were nearly twice as likely to show narrowing of the hip-joint space -- indicating a loss of cartilage lining the joint -than women reporting no

Similarly, based on jointspace narrowing and bony changes, nitrate users had an 84 percent increased likelihood of new, moderateto-severe hip osteoarthritis.

This study, the researchers conclude, provides "some evidence to support the hypothesis that nitrates increase nitric oxide production in the (joint) cartilage, which leads to more rapid erosion of the cartilage and consequently osteoarthritis.

> Source: Arthritis and Rheuma tism, December 15, 2003.

Eat your way to good teeth, kids

Skipping breakfast appears to increase the risk of cavities in young children, new research reports.

U.S. investigators found that children between the ages of 2 and 5 who did not eat breakfast every day were almost 4 times more likely to develop tooth decay in their baby teeth than kids who never skipped the morning

Tots were also more than 3 times more likely to show signs of cavities if they opted out of their daily five servings of fruit and vegetables.

Previous research has shown that children who are poor are more likely to have untreated cavities than other children. However, in the latest Journal of the American Dietetic Association report, youngsters who were not poor but skipped breakfast and their daily ration of fruits and vegetables were more likely to have cavities than poor children.

"Overall, healthy eating is important to protect kids" against cavities, study author Dr. Cynthia Ogden of the Centers for Disease Control and Prevention in

Maryland told. "Parents should be aware that breakfast is an important factor" in keeping their kids'

teeth healthy, she added. Only 23 percent of kids who ate breakfast every day

relative to 34 percent of kids who skipped the morning meal. A history of cavities was seen in only 18 percent of kids who downed at least five servings of fruits and vegetables each day, but in 26 percent of kids who ate fewer servings. In an interview, Ogden

had a history of cavities,

explained that previous research has shown that teens who skip their morning meal are more likely to eat snacks during the day, which tend to be high in sugar. The same tendency may occur in young children, she noted.

"Breakfast kind of provides a nutritional lift first thing in the morning, because then you don't have those cravings later in the day," Ogden said.

Additionally, calcium helps protect teeth from cavities, and milk and cereal - often fortified with calcium provides a good dose of the mineral, she added.

Kids who eat more fruits and vegetables may simply have a healthier diet overall, Ogden noted, and those who get less than five servings per day might be substituting sugar for salad.

Source: Journal of the American Dental Association, January 2004

Curiosity of your kids about sex!

Answering kids' questions about sex is one of the responsibilities many parents dread most. Otherwise confident parents often feel tongue-tied and awkward when it comes to sex. But the subject should not be avoided. By answering children's questions as they arise, parents can help foster healthy feelings about sex. When do children start becoming curious about sex?

Children are human beings and therefore sexual beings. It is hard for parents to acknowledge this, iust as it is hard for children to think of their parents as sexually active. But even infants have curiosity about their own bodies, which is healthy and normal.

What sort of "sexual" behaviour do young children exhibit? Toddlers will often touch them-

selves when they are naked, such as in the bathtub or while being diapered. At this stage of development, they have no modesty. Their parent's reaction will tell them whether their actions are acceptable. Toddlers should not be scolded or made to feel ashamed of being interested in their bodies. It is natural for children to be interested in their own bodies. Some parents may choose to casually ignore selftouching. Others may want to acknowledge that, while they know it feels good, it is a private matter. Parents can make it clear that they expect the child to keep that activity private.

may avert lower extremity ampu-

Infection: Persons with diabe-

tes are generally more prone to

infections than non-diabetic

people. Due to deficiencies in the

ability of white blood cells to

defend against invading bacteria,

diabetics have more difficulty in

dealing with and mounting an

immune response to the infec-

may go undetected, especially in

the presence of diabetic neurop-

athy or vascular disease. Often,

the only sign of a developing

Infections often worsen and

Parents should only be concerned about masturbation if the child seems preoccupied with it to the exclusion of other activities. Victims of sexual abuse sometimes become preoccupied with self-stimulation.

Is it OK to use nicknames for private parts?

By the time a child is 3 years of age, parents may choose to use the correct anatomical words. They may sound clinical, but there is no reason why the proper label should not be used when the child is capable of saying it. These words - penis, vagina, etc.

should be stated matter-offactly, with no implied silliness. That way, the child learns to use them in a direct manner, without embarrassment. In fact, this is what most parents do.

What do you tell a very young child who asks where babies come from?

Depending on the child's age, you can say that the baby grows from an egg in the mommy's womb, pointing to your stomach, and comes out of a special place. called the vagina. There is no need to explain the act of lovemaking because very young children will not understand the

luses, dilsters and dicerations. If

these are left untreated, serious

Special deformities can occur

in persons with neuropathy and

very good circulation. A Charcot

joint, resulting from trauma to the

insensitive foot, causes the foot

to collapse and widen. This

destructive condition is often first

heralded by persistent swelling

and redness, mild to moderate

aching, and an inability to fit into

your usual shoes. If this occurs, it

is important to stay off the foot

and see your podiatric surgeon

immediately.

infections may result.

However, you can say that when a man and a woman love each other, they like to be close to one another. Tell them that the man's sperm joins the woman's egg and then the baby begins to grow. Most children under the age of 6 will accept this answer. Age-appropriate books on the subject are also helpful. Answer your child's question in a straightforward manner, and you will probably find that she/he is satisfied with a little information at a

What should you do if you catch your child playing "doctor," i.e., showing private parts to another child?

Children 3 to 6 years of age are most likely to play "doctor." Many parents overreact when they witness or hear of such behaviour. Heavy-handed scolding is NOT the way to deal with the situation. Nor should parents feel this is promiscuous behaviour or will lead to promiscuity. Often, the presence of a parent is enough to interrupt the play. You may wish to direct your

child's attention to another activity without making a lot of fuss. Later, sit down with your child for a talk. Explain that although you understand his/her interest in his/her friend's body, he/she is getting to be a big girl and people are generally expected to keep their bodies covered in public. This way you have set limits without having made the child feel guilty.

nisea. Continuea pressure oi

walking on the injured skin cre-

ates even further damage and

the ulcer will worsen. The open

sore will frequently become

infected and may even penetrate

recognition of the ulceration by a

podiatric surgeon, avoidance of

walking, avoidance of wearing

"closed-in" shoes, and early

intervention. Besides local

wound care, dressings and

antibiotics, other measures may

be necessary to adequately

eight bearing activities such as

Treatment relies on early

to bone.

This is also an appropriate age to begin to talk about good and bad touch. Tell your child that his/her body is his/her own and that he/she has the right to privacy. No one should touch him/her if she does not like it or want it. Tell him/her that if anyone ever touches him/her in a way that feels strange or bad, he/she should tell that person to stop it and then tell you about it. Explain that you want to know about anything that makes him/her feel bad or uncomfortable.

When should parents sit children down for that allimportant "birds and bees" discussion? Actually, never! Learning about are different, privacy is an important concept for all children to learn. Parents should explain limits regarding privacy the same way that other house rules are explained - matter-of-factly - so that children do not come to associate privacy with guilt or secrecy. Generally, children will

for them To what extent can parents sex should not occur in one all-ordepend on the schools to nothing session. It should be teach sex education?

learn from the limits you establish

education process long before it begins in school. The introduction of formal sex education in the classroom varies. Some of the topics addressed in a sex education class may include anatomy, contraception, sexually transmitted diseases, and pregnancy. Parents should be open to continuing the dialogue and answering questions at home. Schools tend to teach mechanics and science more than values. This is an area where parents can and should have something to teach.

Parents should begin the sex

At what age should girls be told about menstruation?

At what age should nudity in Girls (and boys!) should have Families set their own standards information by parents especially by mothers about menstrual for nudity, modesty, and privacy. Although every family's values cycle, as it is an important part of their life. Instructional books are helpful, but mothers should also share their own personal experiences with their daughters. including when their periods first started and what it felt like, and how, like many things, it was not such a big deal after awhile.

Source: http://www.kidshealth.org