

## New techniques in medicine

# Breakthroughs in battle against the bunions

Advances in anaesthesia have made a massive difference to surgery for painful bunions, as **Judy Hobson** reveals

**S**URGERY TO remove bunions is no longer the painful operation it used to be thanks to modern-day anaesthesia. The use of tiny compression screws instead of wire and plaster to fix the realigned bones is also helping boost its success rate.

A bunion is a deformity that occurs on the knuckle of the big toe – the foot's first metatarsal bone. It can be the result of the foot rolling inwards, which puts pressure on the lower joint of the big toe. This forces the big toe to move over towards the other toes while the bunion sticks out on the inner side of the foot.

Bunions not only cause severe pain and swelling, they can also affect the sufferer's balance. Left untreated, they can lead to serious mobility problems. Around 30 per cent of the UK population will develop a bunion, and women are 15 times more likely than men to get them.

Mr Nick Harris is an orthopaedic surgeon specialising in foot and ankle surgery at Spire Leeds Hospital and the Leeds General Infirmary. He says: "During the course of a year I see loads of women with bunions but only half a dozen men.

"Painful, troublesome bunions tend to present most commonly in middle-aged women the majority of whom have been wearing fashion shoes for the past ten to 20 years. But we can also find them in women who have always worn sensible wide-fitting shoes. This is because these women have a genetic predisposition to develop them.

"Around a third of people who wear shoes will have some degree of bunion problem, so shoes appear to be a significant risk factor, but so too is family history. For example, we know that around two per cent of people in Africa who walk around



ILLUSTRATION BY MICHAEL ROSCOE

barefoot also get bunions." Some people can also develop a small swelling on the outside of their foot beneath their little toe called a bunionette.

"Bunionettes are less common," Mr Harris says. "In my practice I see at least ten bunions for every bunionette. They can occur when someone has a large bunion on the side of their big toe. This leads to the crowding of their other toes, which puts pressure on the outer side of their foot beneath the little toe.

"The area starts to swell and the bunionette begins to rub against their shoe, which makes the swelling worse and leads to deformity of their fifth metatarsal bone. This affects their ability to walk, causes them pain and makes it very difficult for them to find comfortable shoes."

Historically, he admits, surgery to get rid of bunions was recognised as a painful procedure, making some sufferers shy away from it.

The operation to remove bunions and bunionettes is called an osteotomy and involves cutting and realigning the affected metatarsal bones.

"But," Mr Harris says, "advances in anaesthesia have made a massive difference to this type of surgery. While the operation is performed under a general anaesthetic, patients are also given nerve blocks to freeze the nerves in their feet and ankles. This means they are in much less pain when they come round afterwards.

"The other major advance is that we no longer use wires and plaster to fix the bones after they have been cut and realigned. Instead, we use tiny 2mm compression screws which are proving far more reliable. Indeed, these advances are giving us a success rate of more than 90 per cent."

To correct the angular deformities that are caused by bunions, the surgeon has to go into the foot and then break the affected metatarsal and realign it.

Mr Harris explains: "The recovery time is similar to that which follows a fracture. It takes six weeks before they can walk on the forefoot that has been operated on. Until then they are given a surgical shoe to wear and have to walk on their heel when they go to the loo."

Patients are able to go home the same day as their surgery and are given painkillers to take when the nerve blocks

## Julie Bowyer: Suffered both bunions and bunionettes

"I feel as though I've been given a new foot"

Medical receptionist Julie Bowyer not only suffered from painful bunions, she also had bunionettes – bumps that grow on the outer side of the feet at the base of the little toe.

Julie, 56, who lives with husband Clive, 59, a retired financial adviser, in Alwoodley, Leeds, says: "It felt as if I was walking on pebbles. Having pain on both sides of my left foot meant I was unable to walk properly. I had to twist my foot and this made my knee ache.

"I used Ibuprofen to take the edge off the pain and when I got home from work would immediately kick off my shoes and sit massaging my foot while watching TV. In bed my throbbing foot would wake me up. I'd grab hold of my big toe and try to pull it away from the others in an attempt to ease the pain."

Julie started having foot problems in her teens when a bunion began to develop on her right foot.

She says: "My mum and grandma suffered dreadfully with bunions but didn't have surgery despite being in agony. It got to the stage where my grandma could barely walk and my mum could only do so if she wore surgical shoes. I prayed mine would never get that bad."

In her late 20s, however, the bunion on Julie's right foot got worse. She says: "I was working as a sales rep and had to drive long distances, and my foot would really throb afterwards. It was like having toothache all the time."

In 2002, at the age of 42, she decided to have it removed, but then she began having problems in her other foot – the left one. Julie likes to keep fit and regularly goes to the gym, and ten years ago began taking part in 10k charity runs, but three years ago she had to give up running.

"After a run, I'd be in excruciating pain for days. In 2015 I decided I couldn't carry on and saw Mr Nick Harris, an orthopaedic surgeon at the Leeds Spire Hospital."

In February 2016 she had surgery to remove the bunion and bunionette from her left foot and



the bunionette on her right one was removed in October. She says: "I decided to have the worst one done first. This time the surgery was a much better experience than it was 14 years ago. I wasn't in as much pain afterwards, my foot wasn't put in plaster and I didn't have to stay in hospital overnight.

"When the nerve blocks wore off, I did have a little discomfort so I took an Ibuprofen but, by the fourth day, I didn't need to take any painkillers at all. The persistent pain in my foot had gone. Because it wasn't encased in plaster, I didn't need to use crutches. Instead, my foot was covered in bandages and I was given a surgical shoe with a massive platform heel to wear. I was advised to put my weight on this when I needed to go to the loo.

"For the first two weeks I had to keep my foot elevated to allow it time to heal and for the swelling to go down. I stayed in bed and used a couple of pillows to keep my foot propped up. The supportive platform on the surgical shoe made it really easy for me to get around."

After two weeks Julie's stitches were removed and her foot was X-rayed.

"Mr Harris told me it was healing nicely and that I could now be more mobile. Six weeks later I was able to wear my normal shoes.

"When you have the kind of pain I did, it grinds you down. To be rid of it, is well worth six weeks of inconvenience. I'm over the moon, because I feel as though I have been given a new foot. Without doubt, having this surgery is the best thing I've ever done."

wear off. For the first two weeks they are advised to keep the foot elevated to allow it time to heal and to help reduce the swelling. After that they can be a little more mobile but still have to walk on the heel of their surgical shoe.

Getting rid of a bunionette, Mr Harris says, is a more complex procedure because the fifth metatarsal – the bone

beneath the little toe – is half the size of the first metatarsal under the big one. Some patients with both a bunion and a bunionette choose to have surgery on their bunion first.

■ The surgery, which takes one to one and half hours, is available on the NHS and costs £5000 privately.