

By Gill Cox

**A** remarkable new tissue-grafting treatment is being offered by British dentists as a permanent solution to the nerve-jangling tooth sensitivity caused by receding gums.

The treatment, known as gingival grafting, uses collagen derived from donated human tissue. This is processed to remove skin, cells and DNA – and then sewn into the patient's gum-line.

Receding gums, also known as gingival recession, refers to any retraction of the gum-line. It is thought to affect more than half of all adults in the UK.

There is a variety of causes, including chronic gum disease, over-aggressive brushing and night-time tooth grinding, known as bruxism.

The most common symptom is agonising sensitivity to very cold and hot foods. In severe cases teeth can move or fall out.

Receding gums can be recognised by the feeling of a notch in the tooth at the gum-line.

If food becomes trapped or plaque builds up, infection can set in. Once gums have receded, they will never regrow naturally.

Traditional treatment involves a filling – usually white – in the gum line. However, this requires drilling into the tooth, potentially destroying healthy enamel, and continued work as most fillings eventually dislodge.

The new graft tissue, known as AlloDerm, was first developed for hernia and abdominal wall repairs and post-mastectomy breast reconstruction.

Once transplanted, the patient's own blood vessels penetrate the collagen – a protein constituent of body tissue that provides structure and elasticity – and, incredibly, the gums start to grow again.

'As the donor's DNA is removed there is little risk of rejection,' says cosmetic dentist Dr Simon Darfoor, one of the first British practitioners to offer the procedure.

'Once the recipient's own DNA proliferates through, the graft ends up identical in colour to their own tissue.'

Previously, gum grafting relied on harvesting tissue from the patient's soft palate, at the back of the mouth – autologous grafting.

'Cutting palate tissue can leave it very sore,' says Dr Darfoor. 'You're also limited to how much you can use at any one time. To treat four to five teeth you have to go back an equal number of times. That's nine months of treatment.'

'The donor collagen provides a quick solution – it takes 15 to 20 minutes to treat one tooth.'

**D**uring the procedure, carried out under local anaesthetic, the gum is cut and lifted away from the tooth.

The donor tissue is slid under the gum-line and secured using an adhesive or stitches.

One of the first patients to benefit is Chantal Cooke, 43, co-founder of environmental radio station Passion for the Planet, who lives in Morden, South London. She started noticing problems last summer.

'I had an almost throbbing pain in

my teeth while drinking tea,' she says. 'And then I tried eating ice cream – it felt as if my brain was being frozen. I was in agony.'

'It was so depressing. My dentist said that my problem was receding gums and nothing could be done, except for putting a filling in the gum line.'

After some research, Chantal contacted Dr Darfoor. In February, she had two premolars treated with AlloDerm grafts.

'It was painless, except for the anaesthetic injections,' she says. 'That side of my face was swollen for three days,

the gum throbbed, and I could eat only soup.'

'On day four some bruising appeared. It took two weeks for my face to look normal. At that stage the graft looked grey with black stitches. My mouth felt unpleasant because I couldn't brush that area until the stitches came out. Plaque caught on them and smelt vile.'

'Four weeks after the transplant the stitches came out. By then the gum colour was close to my own. Now I'm thrilled. My gums look perfect and I can eat ice cream again.'

Professor Nick Donos, head of periodontology at the University College London Eastman Dental Institute and Hospital, believes autologous grafting is still the best option.

'If the palate tissue is thin, or many teeth need treatment, then Allo-

Derm may be an alternative,' he says. 'But you can end up with something that looks like a scar.'

Both dental specialists agree it's vital to be realistic with patients about what's achievable.

'Patients are ruled out if they have a high risk of infection, have poor liver function, or there's a third of an inch of gum recession as that tooth is probably on its way out,' says Dr Darfoor.

'Age is another factor. With increasing age the gums have reduced blood supply, meaning a graft might not take.'

Chantal wasn't deterred by a bill of nearly £2,000. She says: 'The treated gum is fuller, fatter, healthier looking, and less food gets trapped which will help keep them healthy.'

'I'm booked in to make the right side match.'

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Receding gums left Chantal Cooke with agonisingly sensitive teeth. But now she has been cured by an astonishing new tissue-grafting procedure

# BY GUM! Chantal can eat ice cream again



**SET AND MATCH:** Chantal, above. Left: How her middle two teeth and gums looked before, far left, and after her gingival graft procedure

## DOCTOR DOCTOR

**Q** Is it safe to keep leftover antibiotic ointment in my medicine cabinet?

**A** It is best to discard the remaining ointment and use a fresh prescription if needed again.

## Doctor Heal Thyself



Professor Jonathan Waxman, 59, is professor of oncology at Hammersmith Hospital. He has written 11 books on

cancer and is founder of the Prostate Cancer Charity. He lives in London with partner Naomi, a property consultant, and children Thea, 17, and Freddie, 14.

### JABS ARE BETTER THAN BUGS

When I was eight, I got chickenpox two weeks before I was due to move school, and the day before I was due to get the slipper. So I avoided a beating. It was a high point of my school career. We still don't vaccinate children against chickenpox as it's one of the few childhood diseases that it's safer to have. However, I'm a big fan of jabs in general as they are far safer than having the disease proper.

### DRINK LIKE A FISH

I haven't drunk alcohol for years. But I do drink three litres of water every day. The more fluid that you drink, the more that you will pee out the poisons and carcinogens and lower the risk of problems such as kidney stones.



### EAT ORANGES, NOT PILLS

You can absorb only a certain amount of Vitamin C each day, about 100mg, which you'll find in one and a half oranges. Take any more than that, and you pee it out. So 1000mg Vitamin C tablets are completely unnecessary.

### DON'T WORRY ABOUT EXERCISE

There is no link between exercise and cancer, but sedentary lifestyle is associated with other cancer-causing factors. If you're twice as fat as the average person, you're twice as likely to get cancer. So staying slim is important to minimise cancer risk. Good diet is more effective for slimming than exercise, since you need a lot of exercise to make a small difference.

### KEEP A STASH OF ANTIBIOTICS

I get bored lying on the beach so I prefer to holiday in places such as Colombia and Mongolia. I always take antibiotic pills with me to deal with the inevitable stomach upsets. If you do the same, never keep drugs beyond the expiry date.

### SAY NO TO BACON

Fifty per cent of prostate cancer is caused by diet. The main risk is eating meat. The best advice to avoid prostate cancer is to modify diet and not eat too much of the chief two causes – dairy products and smoked foods. The smoking process gives foods higher levels of cancer-causing chemicals.

