The Burning Issue

Sun bathing can cause skin cancer. But do we care?

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It started with looking at the tanned girls in magazines. Or it started in Skegness. Or it began when she was in Greece for a fortnight when she was 16. For Rachel Solway, who is now 30, it really started four years ago when her boyfriend noticed an unfamiliar mark on her toe. It was a small thing, about 2.5mm round, and it wasn't itching or bleeding or asymmetrical like they warn you about, but it had turned a little darker than when she had first seen it a year before. Her doctor said, 'I wouldn't worry about it, but do you want to go to see a specialist?'
Solway works as a human resource manager for Shell in London. She has blue eyes and light brown hair, the sort of complexion that demands a sunscreen with a protection factor of 15 or above, but social trends may demand a little less. As she says: 'Everything looks so much better when you're tanned. You feel so much healthier. There's nothing like coming back to Britain in early September with a late-summer tan and walking into college or work and everyone going, "My God, you look fantastic!"'
She began to take holidays abroad in her mid-teens, first to Greece, then Spain and the Canary Islands. She found that she tanned easily and well, and her regime didn't change much from country to country. 'I'm a good size 10/12,' she says, 'and you don't want to take everything off in the UK, but you'll take it off when you're abroad. I did use suntan lotion. I'd start on 15, and in the last few days I used to call it going for the burn. I would put on Hawaiian Tropic Factor 4, and lie in the sun for eight hours a day and go brown. Now and again I'd burn. Maybe one day on each holiday I'd burn one part of me because I'd missed a bit - a shoulder or a leg - not blisters, or to the point where I'd require any type of medical assistance. I'd just go red and I'd get in the shower and it would sting.'
Solway had always had a number of moles on her back and arms, and in 1999 she first noticed that mark on her toe. The first specialist thought it looked fine, but when her boyfriend remarked that it 'looked disgusting' a year later, she called to see him again. He was on holiday. His secretary gave her the number of someone else.
'He had a cancellation that afternoon so I went along straightaway,' Solway says. 'He looked at it and said, "I think it's OK, but it is dark, and while you're here I'm going to cut it off." He did the operation there and then with a local anaesthetic, and I had three stitches in my toe.
'Ten days later I had a follow-up appointment and he said: "Sorry, it's a malignant melanoma." He said he wanted me in hospital the next day. He was going to take off another chunk from my toe to ensure all the malignant cells had been caught, then he would find out which part of the lymphatic drainage system it was connected to, then he would take those lymph nodes out to find if it had

spread.' Solway remembers the room spinning. She didn't cry when he told her - too shocked and confused. 'I remember saying to him: "So, it's a bad mole." He said: "It's more than a bad mole. It's a malignant melanoma." I was going, "Malignant... malignant - that's like cancer." I didn't really get it. He said to me a malignant melanoma is like a tumour, but just small and on the surface.'

She called her mother from the consulting room. 'My mother said, "Hello darling, can I call you back, I'm in the middle of making porridge for Gran." I said, "Actually, no." My mother asked the doctor, "Well, how serious is this?" And all he could say was that he'd do the operation and find out. That's always the answer they give if they think it could be serious. And that made me realise: "Fuck."'

Skin cancer is not just for farmers and Australians any more. Soon we may all know someone with Rachel Solway's predicament, for skin cancer is the most common cancer in the UK, and the annual increase in rates of melanoma are higher than any other type. There are about 70,000 cases of skin cancer reported each year, of which almost 7,000 are malignant; of these, about 1,600 are fatal. Rates have been rising steadily in the UK since the Seventies, increasing fourfold in men and threefold in women. Malignant melanoma is the third most common cancer in people between the ages of 15 and 39, with most cases appearing between 40 and 60. Cancer Research UK reports that cases of melanoma have increased by 28 per cent in men and 12 per cent in women over the past five years where data is available.

We may blame cheap airfares to sizzling beaches. We may blame the marketing of sunscreen and cool sunglasses. We may mention Coco Chanel and Brigitte Bardot and the Piz Buin St Tropez look, or Wham! and 'Club Tropicana', but we'd just be looking not to blame ourselves. Skin cancer is the most preventable of all cancers, and we may reduce incidence dramatically. But in recent years we have chosen another path. And so each day, Dr Julia Newton-Bishop arrives at work to find she has more patients this week than the week before.

Dr Newton-Bishop is a consultant dermatologist at St James's University Hospital in Leeds. She has been researching melanoma for 15 years, studying gene patterns and why some people respond to treatment better than others. She says her patient caseload has increased phenomenally, and she regularly delivers bad news. 'Generally, of course, people are scared and shocked when you say it's a melanoma. Some people have very little idea about what it means, and there's a slow dawning. When I give the diagnosis I say, "So now I'll have to keep my beady little eye on you for five years", and that brings it home to them. They learn that melanoma is treatable if you get it early enough, but it's hardly a trivial thing.'

The computer in her office displays an image taken on a crowded beach in Dieppe in 1926, its occupants swaddled in dark dresses and hats and boots in a struggle to avoid the sun in the days before they quite understood what it did. She then calls up a far more recent beach photo of a fat man next to a small child. The man's back is bright red and he's gone out for more; the child is not wearing a hat.

'This century has experienced something we have never experienced before,' the dermatologist says. 'Fair-skinned individuals exposing their skin to the sun in sudden and short bursts.' In previous years, she suggests, the wealthy associated

tanned skin with the labouring classes. 'But now we have a disease of those of higher socio-economic status who work inside most of the year and then run through the cycle of being white, red and then brown. People say, "Well, I'm hardly in the sun. I only have two weeks in the summer, and you surely don't expect me to give that up?" and I try to explain that that's the problem.'

Dr Newton-Bishop is preparing a CD to give to her new patients and to those involved in prevention. 'It's very difficult to persuade people to stop doing something they really love,' she says. 'Come May Bank Holiday you can see burnt people everywhere.' Beyond her circle of patients, she finds it difficult to persuade young adults that melanoma is for everyone. 'People are being asked to change their behaviour when there isn't anything visible to gain by it. They might change their diet and reduce their risk of heart disease, but they'll be doing it because they want to lose weight, so there's some immediate advantage. Even with smoking you can justify an instant gain because your breath won't smell and you'll save money. Of course, if you stay out of the sun you'll have younger-looking skin for longer, but a 20-year-old is not that interested.'

Dr Newton-Bishop used to be just like them. She remembers discussions at medical school about getting her legs started 'at the beginning of the season', and in her early twenties she got burnt in the south of France. The classic: falling asleep on the beach. She's never had a suntan since; her learning works against it. The doctor knows from recent research that applying sunscreen may create a false sense of security in users. A survey in which participants used factor 30 found that they stayed in the sun longer, and developed more moles. A large mole count (100+) on an individual, and a tendency to freckle, is an established indication of greater risk of skin cancer. (It is believed that people with white skin are 40 times more likely to develop melanoma than those with coloured or black skin.)

She also knows that the most susceptible groups are not just the pale-skinned or those with ginger hair, but also those with darker hair and blue eyes. The high incidence of melanoma in Australia is partially explained by the presence of those with a susceptible complexion who emigrated from Ireland, Scotland and England, 'like two very similar populations living at two very different latitudes'. The contraction and gestation of skin cancer is still not entirely understood. Some cases may be triggered by genetic inheritance, but most skin tumours are probably caused by a number of environmental events, the most significant of which is an incident of sunburn in childhood. Early irradiation of a cell caused by ultraviolet rays (both UVA and UVB) will damage DNA and make it divide faster, and an adverse effect on the immune system will make self-repair slower. Subsequent damage will compound the problems, but this line of reasoning also offers some hope: if UV light is needed at every step to make a skin cancer progress, a lack of such light and natural repair over a period of time may reverse the process.

The strongest case for this argument comes from Australia, where an aggressive programme of health education has already led to a large decrease in new cases, particularly in young people. This has occurred after only 15 to 20 years, and suggests that early damage from sunburn may be contained by a change in behaviour. In Australia, where the incidence of melanoma per capita has

traditionally been almost twice that of the UK, mortality rates have risen at a much slower comparative rate in the past decade - Australia now has about 1,000 deaths from melanoma each year, 600 fewer than the UK.

The prevention campaigns in Australia were boosted by the fact that so many people knew someone who had gone under the knife. In the UK, we may be heading the same way. Dr Newton-Bishop says that many of her patients return to work after diagnosis to find that colleagues will share a similar experience. She has observed some improvement in behaviour - she sees more young children with hats on her way to work - but she has also noticed the success of the cheap Jet2 airline that operates from Leeds-Bradford airport to Alicante, Barcelona and Majorca. 'It's like catching a bus and it's lovely and you can't blame people,' she says. 'But if we don't change our behaviour, the problem is just going to go on and on.'

The changing of ingrained behaviour is something that occupies the working hours of Sara Hiom, the pale-skinned information manager at Cancer Research UK (CRUK). She works at the edge of Lincoln's Inn Fields in London, and she says she protects herself even to cross the park.

Among her files is a survey conducted earlier this year in which 1,800 people were interviewed in their homes about their understanding of skin cancer and attitudes towards the sun. This found that 70 per cent of people between 16 and 24 hope to sunbathe on their holidays this summer. The nature of the problem was revealed vividly last year in the comments from young people in another survey conducted for CRUK at the University of Strathclyde. Many showed a growing awareness of skin cancer, others a marked indifference. 'When you go down to the beach you see the Brits out in the sun and everyone else all covered up,' one man observed. Another said: 'There's no one at my work who'd use suncream.' Others said: 'I've burnt loads of times!'; 'I normally get burnt every year'; 'You don't start thinking about this UVA and all this rubbish.'

Hiom's struggle against the tanning culture is not entirely a lost cause, but there is a tone of defeat in her voice. She tells people that tanning is a reaction to damage, and not really healthy at all, and she detects a mild disbelief that may also manifest as animosity. 'You can come up against an awful lot of opposition just trying to put information out,' she says. 'You have to be so careful to not tell people what to do. We're trying to get across a responsible message without sounding tired and boring and like the sun police, but skin cancer prevention is not very trendy. Nothing will ever make it trendy - people think we're just out to spoil everybody's fun.'

It has become clear to Hiom and her colleagues that the best way to talk to people aged between 15 and 25 is to appeal to their vanity; to talk of potential skin cancer in 20 years' time is like telling children not to eat sweets for fear of false teeth. She found that sunscreen was the one concession they were prepared to make to protect themselves, but they would invariably use too low a factor, a two or a four, so they'd tan faster. 'They'd say to us, "You say use factor 15, but if I use that I'm not going to tan, am I?" I want to say to them: "Well, that is the idea."'

But the promotion of sunscreen throws up dilemmas of its own. The messages can be confusing: if you normally burn in 10 minutes, it is wrong to think that factor 15 will save you for 150 minutes. The current CRUK campaign deliberately

mentions suncream as a last resort, the barrier that protects you when you can no longer remain in the shade. 'There is just no proof that using sunscreen reduces the risk of skin cancer,' Hiom reasons. 'We know it limits the chance of burning, and that burning can increase your risk of skin cancer, but you can't make the leap between the two.'

Last year a report from cell biologists at Mount Vernon Hospital in Middlesex warned that some sunscreens blocked only ultraviolet-B rays, but failed to block 50 per cent of UVA, believed to play an important role in both skin cancer and ageing. There have also been suggestions that sunscreen itself may be carcinogenic once the chemicals have been absorbed into the bloodstream, although with little firm evidence the benefits probably outweigh the risks.

Sunbeds are widely recognised as increasing the risk of skin cancer among those who burn easily outdoors, and there are plans to prevent sunbeds being used by those under 16, although no one can imagine how this might be policed.

So what to do? Perhaps increased funding will help: CRUK receives an annual grant of only £170,000 for its SunSmart programme, a negligible figure compared to the outlay on other preventable diseases and anti-smoking campaigns. Or perhaps a celebrity endorsement is the answer. Hiom is keen to recruit the likes of Helena Bonham Carter, Cate Blanchett and Nicole Kidman to support the message that you can be pale and still desirable. She understands there is a clause in Kidman's film contracts that prohibit her from working outdoors when the sun is high. But porcelain beauties are hard to come by, and there's a whole world out there that would counterbalance their endorsements.

'We just need a complete change,' Hiom says. 'The way lying on a tropical beach is sold as paradise, the way sunscreens are sold to enable people to lie in the sun for longer - that's what we're up against. But how on earth we get back to that Victorian way of thinking where the sun is something to be avoided I really don't know.'

In the meantime, Hiom dismisses minority reports from America that overzealous anti-sun campaigns are causing vitamin D deficiency, and plugs away with her magazine advertisements and free postcards for distribution in schools. One of these cards displays a lobster on a beach towel, and on the other side the basic tenets of how you may possibly extend your life. Stay in the shade between 11am and 3pm; prevent the possibility of burning; cover up with wide-brimmed hats, sunglasses and loose-fitting clothing; take extra care with children and keep babies out of the sun completely; use a sunscreen with at least factor 15 protection, applied 30 minutes before sun exposure; and if you suspect you may have an unusual mole or skin growth, seek advice from your doctor. 'The night before my operation I couldn't sleep at all,' Rachel Solway remembers. 'I have a 2.5in scar on the top of my inner thigh where they took the lymph nodes out. I also have a scar on my groin where they took out the secondary lymph nodes.

I then had skin taken off my right leg and my right buttock, and they took more of my toe off and they put the skin graft over it.' She woke up with 20 stitches and her leg in a harness. She was home on crutches after four days, and after 10 days she went back to see the specialist. He said they got it in time. They successfully excised the malignant cells, and there was no indication of any spread.

Solway was checked every couple of weeks and then every three months. They

chopped off another couple of moles, but they were non-malignant. 'If they see anything on me that looks funny they just get the scalpel out and cut it off,' she says. She also saw an oncologist who suggested some lifestyle changes, including no sun and factor 50. Solway then went on holiday to Sardinia and sat under a parasol, where she had time to reflect.

'I was 26. You don't get cancer when you're 26. It definitely does change the behaviour of people around you. My friends are all pissed off, because none of them feels they can get a guilt-free tan any more. I don't think any of my friends do that sunbathing thing of lying out at the beach all day.' A couple of her friends have also had moles removed, and a husband of a friend at work had a malignant melanoma on his back cut out before it spread.

Solway has since travelled in South and Central America, and finds that she does still pick up a little colour. Sometimes she applies fake tan from a plastic tube, and she says she has just as good a time as she had before she became unwell.

http://www.cancerhelp.co.uk