

AN INNOVATIVE

Emma Smith was horrified when a back specialist held up an X-ray of her spine. It was so curved it was an S-shape, not a smooth C-shape, and the vertebrae looked like a spiral.

Poor Emma was overwhelmed and tearful. She was only 13 and, days before, had visited her doctor after noticing her right hip was larger than her left.

"I hadn't been worried. I thought it was to do with growing. I just hoping faster than the other," says Emma, who lives with her parents and brother in New Malden, Surrey.

After being referred to Epson Hospital, the X-ray confirmed her doctor's suspicions. Emma was diagnosed with scoliosis, curvature of the spine, where the spine develops abnormally and twists from side to side.

Traditionally, sufferers have to wear braces to help keep their spine straight, but there is growing support for a treatment called PAM or Power Assisted Micro-Manipulation. More than 170 practitioners are using it across the UK, and a patient's association for PAM has just been launched on the Internet.

Designed by a British engineer who was suffering from back pain, PAM aims to help sufferers by manipulating the spine to improve flexibility and mobility. It consists of a handset with four bionic fingers, which is powered by air using a compressor. Two bionic fingers are placed either side of the spine and these are then guided by a registered chiropractor or osteopath so that it is almost an extension of their hand. The pressure and speed can always be adjusted.

No one knows what triggers scoliosis and it is not hereditary, but it is rarely present at birth and almost never develops in adults. Instead, it is commonly diagnosed in adolescence, when the condition can progress very quickly.

According to Professor Robert Dickson, President of the British Scoliosis Society, two out of every 1,000 teenagers may need surgery to have their spine straightened, and as many as 105,000 teenagers have to live with small curves in their spine.

"I was very scared. All I could do was cry. It was something I'd never heard of before, says Emma. "I was told I would have to wear a back brace for at least two years, for 23

NEW TREATMENT OFFERS HOPE FOR DISABLING BACK CONDITIONS

The machine that ironed out my damaged spine

specialist's advice was to carry on with her back exercises, then her father suggested she try one PAM treatment, just to see if it helped.

"I came away from that first treatment feeling so much looser and more flexible, and I've carried on going ever since," says Emma. "It feels like it unlocks my spine. When I haven't had a treatment for a while I know about it because my back becomes stiff."

Sessions usually last about 20 minutes, after the initial one-hour consultation. Practitioners expect people to need between three and five treatments, then the occasional maintenance treatment every six months.

"I found PAM quite relaxing," says Emma. "It feels like a massage on the parts of your back that are well. When it's working on parts that are twisted, it can be a bit uncomfortable, but it's not painful."

RENE PHILLIPS, a registered osteopath, who runs the Backcare Clinic in Worcester, Surrey, was the first practitioner to use PAM in the UK. "I think it is quite a breakthrough in the treatment of back problems," she says. "The principle behind it is that the spine should be supple all the way along. In people with scoliosis, and with other back problems, the spine becomes fixed. With PAM you can feel where some joints have become wedged and

gently rock the vertebrae. I have had lots of positive feedback because patients improve so quickly. It treats the cause of problems, not the symptoms. It should be in hospitals because it would help so many back pain sufferers."

Emma found the PAM treatments not only reduced the gnawing pains she would sometimes get in her lower back, but also reduced the curvature. But she also knows that her condition will always need to be closely monitored.

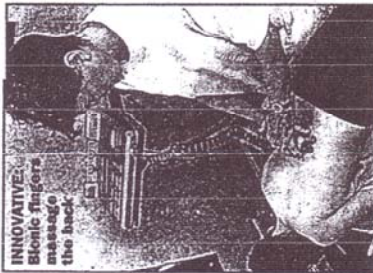
"I get worried about when I'm old, but I feel a lot more comfortable with my back now," she says.

"The PAM treatments seem to have flattened and straightened out the curves in my spine. I used to have a bump where my spine pushed out at the base of my back. Now it's hardly noticeable. I'm not embarrassed any more. I'll go to the beach and wear a bikini because I know no one will notice anything."

● For details of your nearest PAM practitioner, send an SAE to The Backcare Clinic, 2 Station Approach, Worcester Park, Surrey KT4 7NR, or telephone 020 8315 3787. Treatments cost between £35 and £50. For the patient's association for PAM log on to www.pamosteopathy.org. For further information on scoliosis, contact the Scoliosis Association (UK) on 020 8964 5343 or visit www.scauk.org.uk

LUCY MILLER

RELIEF: I feel that PAM unlocks my spine, says scoliosis sufferer Emma Smith



INNOVATIVE: Bionic fingers massage the back