This is an exact reprint of the Daily Mail's ground-breaking report on news of this unique device.

By Lesley Turner Tuesday 7th April 1998 FEATURE

A new device could help relieve pain for people suffering conditions ranging from arthritis to migraine.

The Action Potential Simulation (APS) machine uses low voltage electrical currents to increase blood flow to the injured or diseased areas, thereby stimulating production of the body's natural analysis.

After clinical trials worldwide, it has been found to relieve pain, mobilise stiff joints, reduce swelling and improve blood circulation. Because it is a drug-free and non-surgical treatment, there is no risk of the unpleasant side effects that go hand-in-hand with other options. APS was invented by South African electronics engineer Gervin Lubbe, and has been used in South

African hospitals for three years. Now it has been launched in the UK, where it received an enthusiastic response from staff at the Princess Alexandra Hospital in Harlow, Essex. Bio-medical engineer John Sandham says the machine is being used mainly to help patients on orthopaedic wards. One lady admitted with osteoporosis in the back, was immobile when she came in' he says. 'After two weeks of drug therapy she could walk, but she was still in a lot of pain and experiencing side effects from the drugs. 'We put her on APS and within four days her pain level went down from nine out of ten to less than one out of ten. It was quite staggering'. APS has also been used on patients with fractured bones. A 17 year-old lad had broken his heelbone after a cycling accident and the inflammation had caused his foot to swell to the size of a volley ball. 'The swelling was putting pressure on the nerves, which meant he couldn't

crushing the nerves'.

Until now, the only other option has been anti-inflammatory drugs. There are already a number of electrical devices available for pain relief, but APS uses a unique wave pattern which imitates the body's natural electrical impulses, encouraging the lymphatic glands to work efficiently to drain inflamed areas of excess fluid.

move his toes. During his first treatment with

APS, the inflammation reduced sufficiently for

him to be able to move his toes again. A lot of

pain in cases like these is due to inflammation

It also increases the level of the body's natural painkillers, endorphins, and these have the secondary effect of slightly thinning the blood in the affected area. The less thick the blood, the better the circulation – which means healing enzymes have easier access to the site of pain or injury.

Each APS treatment takes around 8 minutes per day. Patients report no discomfort, just a mild tingling around the affected area.



John Irvine uses the APS machine to treat his bad back and his daughter Jessica's injured neck.

APS has been successfully used to treat osteo and rheumatoid arthritis, sinusitis, chronic back pain, sciatic pain, gout, Bell's palsy, migraine and Seasonal Affective Disorder. John Irvine, a 45 year-old business man from Bracknell, Berkshire says the machine relieved him of the chronic back pain he had been suffering for nine years.

Mr Irvine has had two crushed discs in his lower back and has spent thousands of pounds on every treatment available, in a bid to relieve the agony. I'm a keen sportsman and I've run five marathons, but constant spasms meant I couldn't even stand up straight, he says. For eight months I had traction every morning, I've tried everything from physiotherapy to acupuncture – but nothing worked in the long term. My masseur told me about APS. The first time I introduced to it I couldn't even walk because of the pain, but after just one treatment I walked out upright. After two further treatments I was running around as I used to'.

Mr Irvine bought a machine of his own and considers the £1,180 outlay an investment. He has used APS to help his eight-year-old daughter, Jessica, who injured her neck while performing gymnastics, and his mother Margaret, who is arthritic.

'My mother is 66 and couldn't get in or out of the car or do up her own shoelaces', he says. 'She has had five sessions of APS and it has helped her mobility no end, it relaxes all the muscles and doesn't mask the pain, which

is when you can do yourself more damage. I swear by it'.

APS therapy is suitable for people of all ages but should not be used by individuals with pacemakers, those with epilepsy or thrombosis, or pregnant women.

It is hoped it will become widely available in NHS hospitals and there is already an established network of private therapists using it. John Sandham says: 'I was impressed with the speed in which it helps people on the orthopaedic wards to heal. With some patients, inflammation is so severe that operating is impossible. If it can accelerate the healing process, APS could have immense implications for all hospitals under pressure'.

