Don't get a new hip, just reline the old one

By JOHN CHARLES

WHAT do you do if you need a new hip but you cannot face the prospect of a hip replacement? The answer could be revolutionary surgery to reline the damaged joint.

Sixty-five-year-old Don Laithe, who has his own electronic publishing company, underwent the pioneering operation and it is already so fit that he is walking five miles a day.

The new 'resurfacing' technique, recommended for younger patients, achieves the same benefits as conventional hip replacement but with simpler, less invasive surgery.

It may mean that hip replacements will become unnecessary for tens of thousands of younger people crippled by arthritis.

Nearly 660 patients, with an average age of 48, have been treated by surgeons at the Royal Orthopaedic and Nuffield Hospitals in Birmingham.

One of the major benefits is bone conservation. The amount of bone removed in total hip replacement is about the size of a fist, while in resurfacing it is merely the size of a large knuckle. The more bone patients retain, the more mobile they tend to be.

The operation may sound simple, but it marks the culmination of more than 30 years of trial and error, and research into the science of biological materials, lubrication of joints, elasticity of tissue and the acceptance of foreign materials within bone and joint tissue.

Surgeons remove the remnants of diseased cartilage from the joint and replace it with a new lining, comprising a metal head and cup-like implant which prevents the bones from rubbing painfully against one another.

Surgeons estimate that the new metal lining results in a hundred times less wear and tear than the old metal and plastic joints.

Next is the all-important bonding process. The implant is coated with synthetic bone, which is so like the real thing that the body treats it as if it would own its own.

The synthetic bone consists of a substance called hydroxyapatite, derived from tooth enamel, and it is also used in dental implants and other types of joint surgery.

Natural bone fuses with synthetic bone, growing into the tiny dot-like holes lining the implant.

Within a fortnight of the 45-minute operation, patients usually experience good fusion of their bone into the implant.

Mr Laithe, 59, who owns a farm and lives in a picturesque watermill in Farewell, near Lichfield, Staffordshire, typifies the new generation of sportsmen in their 40s and 50s. Sport has always been his passion and he was running up until March this year, when decades of physical wear and tear finally left his painful mark.

He says: 'I was an invalid. I could have had a hip replacement operation 18 months ago, but they said I'd be unable to take rigorous exercise.

'So I said: "No thank you." I didn't want that. I reasoned that since I've been lucky and able enough to keep myself fit and active throughout my life, why shouldn't I try to carry on being active for as long as possible.

'The total hip replacement, universally acclaimed as one of the most successful operations ever, was pioneered by the legendary surgeon Sir John Charnley more than 35 years ago. But he always regarded total hip replacement as second best. He had tried but failed to develop a simpler 'resurfacing' operation.

Fifteen years after Sir John's death, the Birmingham surgeons are realising his dream. Consultant surgeon Derek McMinn, who recently described the new resurfacing technique to the British Orthopaedic Association, says: 'Sir John's original idea failed only for lack of the right material.

'He used Teflon, but this wore out within two years, making further surgery necessary.

'Although the Birmingham technique seems very successful, it will be classified as 'unproven' for at least ten years — as was the world-famous Charnley hip replacement before it.'

Mr McMinn says: 'We don't know what the failure rate of the new procedure will be, and because of this I'm going to carry on recommending total hip replacements for older people, as it has a proven safety record in that age group.

'This is not true of young people. In elderly people, 80 per cent of total hip replacements last 20 years; while in younger ones there is at least a 50 per cent failure rate.

'Every year in Britain there are 40,000 hip replacements and a further 13,000 revision operations to replace loose artificial joints. Mr McMinn says that if a resurfacing operation were to fail within a few years, the patient could then have a conventional hip replacement.'