Movement After Stroke, Brain Or Nerve Injury

A Leeds surgeon is doing groundbreaking work in her profession helping to restore movement to paralysed limbs.

Catherine Hernon, a consultant plastic and reconstructive surgeon at Spire Leeds Hospital carries out pioneering surgery on puralysed upper limbs caused by a stroke, brain or nerve injury that can help improve quality of life for a patient, part of a unique service offered at the Roundhay-based hospital. Catherine was also involved in the UK's first hand transplant operation in 2012, and first double hand transplant in 2016, as a member of the specialist surgical team led by Professor Simon Kay.

Catherine has a special interest in upper limb spasticity and surgical reconstruction of tendons, muscles and nerves, helping to restore movement to arms and hands in both adults and children.

It's challenging work, especially when dealing with the unpredictability of brain damage. We are achieving good results that are changing daily life for many patients," she said.

There are more than 100,000 strokes in the UK each year, that's around one every five minutes. With 1.3 million stroke survivors, it is the leading cause of disability in the UK with almost two thirds of sufferers left with a disability.

Catherine said, "The loss of movement can happen after the body's nervous system has been damaged, issually after a stroke, disease or injury, or in children born with cerebral polsy. It can have a huge impact on your daily life affecting the way you move your arms and making it difficult to control movement. Without treatment muscles can seem frozen making it difficult to do normal daily tasks."

The surgery focuses on rebalancing the disordered function of these muscles by redirecting the tense muscles and tendons to power the weaker muscles and tendons. This rebalancing can improve the function of the affected limbs," she said.

Catherine's work also involves tetraplegia – a paralysis affecting all four limbs that can involve partial or total loss of use.

Born in Manchester, Catherine developed an interest in medicine from me early age and was inspired by two strong female role models. "Medicine seemed like a good combination of arts and sciences. My sister, Mary Hernon, had also studied medicine and hearing about her experiences inspired me. Then as a medical student I did a project on breast reconstruction with a female plastic surgeon in Manchester, Ann Brain. Seeing how plastic surgery could restore physical form and self-esteem I decided to become a plastic surgeon after that."

After studying at St Andrews University in Scotland she completed her specialist training in plastic and reconstructive surgery in Yorkshire. She then gained further experience in hand surgery by undertaking hand fellowship posts in Leeds and the St Andrews centre for plastic surgery and burns in Chelmsford.

Prior to starting her consultant post she spent a subbatical in Norrland's University Hospital in Sweden furthering her experience in the surgical treatment of upper limb spasticity. She has been a consultant plastic, hand and reconstructive surgeon since 2010 and also works in the field of cosmetic surgery.



When she is not working, Catherine, who lives in north Leeds, enjoys playing golf, cycling, charity fundraising bike rides and yoga.

Cutherine said, "What I love most about my work is making life easter for people by giving them some independence and taking away daily frustrations for those who have limitations. I'm passionate about this work, it really helps."