

One of world's largest spine study highlights risk factors of prolapsed disc post-surgery

Data from one of the world's largest spine study, which analysed the reoccurrence and risk factors of prolapsed disc post-surgery, has been presented at this year's EUROSPINE conference by London Norwich Spine Clinic.

Collected over a 10-year period, the study reviewed 888 lumbar discectomy patients who all had a minimum of two years follow-up. The results revealed that the female sex, smoking, and having a higher pre-operation disability were all factors for reherniation.

The research was carried out by Spinal Consultant Mr Am Rai and his colleagues from the Department of Orthopaedics and Spinal Surgery at the Spire Norwich Hospital and Norfolk and Norwich University Hospital.

Surgical discectomy is an effective treatment for lumbar intervertebral disc herniation but despite developments in technique, the incidence of reoperation is estimated to be between 13% to 25%. Until now robust predictive metrics and risk factors associated with recurrent lumbar disc herniation haven't been clearly defined.

The independent study looked at patient demographics and patient-reported outcome measures including back and leg pain. Postoperative data was also collected from clinical notes and MRI database and the team checked against all imaging providers in the region. Diagnosis was confirmed clinically or by operative findings

Mr Rai explains: *"The rate of reherniation after lumbar discectomy varies widely and the role of risk factors has not been fully established. Equally, among clinicians, the subsequent treatment option in the management of symptomatic recurrent lumbar disc herniation remains unclear.*

"The aim of the study was therefore to identify the true incidence and the associated risk factors. It is the largest one of its kind and the findings are important for healthcare practitioners globally when developing management strategies."

The London Norwich Spine Clinic was founded by Mr Rai in 2003 to give patients with spinal conditions access to the best surgical care.

Headquartered in Norwich, and with state-of-the-art facilities in London, the clinic specialises in treating a wide range of problems, including disc herniations in the neck and lower back, spinal deformities such as scoliosis and kyphosis in adults and children, plus trauma, infections and tumours. With access to world-class diagnostic equipment, the specialist clinic offers both conservative and surgical techniques, providing innovative solutions and personalised care for patients from across the UK and abroad.

Mr Rai was elected President of the British Association of Spinal Surgeons by his surgical peers and has been on the BASS Executive Committee for 6 years. He has

also published on national best practice surgical guidelines, helped develop the British Spinal Registry (over 140,000 patients), and been involved in National Institute for Health and Care Excellence (NICE) guidelines and government-led regional variation in surgical practice across England.

Due to COVID-19 restrictions, the research was presented virtually at EUROSPINE – an international conference hosted by the Spine Society of Europe. The event shares knowledge and ideas in the field of research, prevention and treatment of spine diseases and related problems, and coordinates efforts undertaken in European countries for further development in this field.