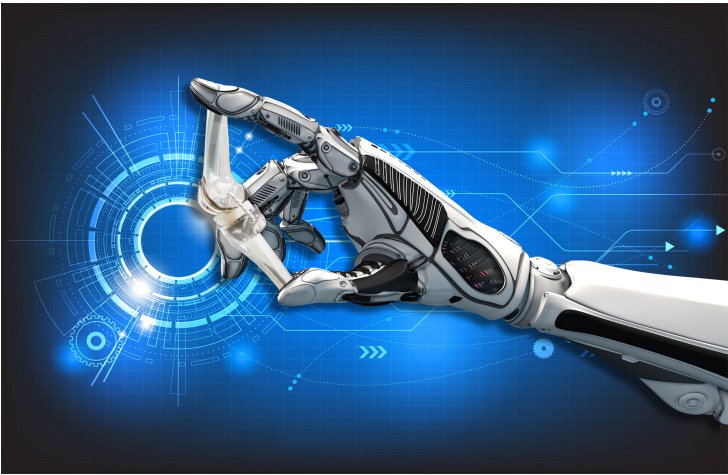


New robotic technique in knee replacement surgeries at Aakash Healthcare

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NAVIO Robotics gives - precision in mapping the joints, minimal pain and blood loss, minimally invasive and less scars, speedy recovery, reduced hospital stay and enhances life of the implant



Aakash Healthcare has introduced the revolutionary robotics technique on 27 March, 2019 for the treatment of Total Knee Replacement Surgery - NAVIO Robotics by Smith & Nephew.

The NAVIO Robotics is designed to deliver consistent and accurate results through the utilization of a surgeon-controlled robotics assisted hand piece, coupled with NAVIO specific cut guides. This unique combination yields an intuitive and efficient workflow for the team of surgical experts. Not only does this technology benefit the surgeons and clinicians, it benefits the patients a great deal, the recovery scale is quick, stays are shorter than usual, blood loss is minimal and preserves all-natural structures of the joint with precision. So far through NAVIO Robotics, Aakash Healthcare has completed 30 number of successful surgeries.

NAVIO provides the accuracy from robotics-assistance as well as the flexibility of multiple pioneering implant designs for partial and total knees to accommodate surgeon and patient needs. The versatile NAVIO planning software enables precise implant alignment and ligament balance, without the need for a pre-operative CT scan. Eliminating the dependency on pre-operative imaging allows the surgeon to seamlessly plan for either a partial or total knee procedure at the time of surgery.

The NAVIO system provides robotic assistance through an advanced computer program. Before a Knee replacement surgery, the computer scans and relays precise information about the patient's knee joint to a robotics-assisted arm. By using this patient-specific information, the computer establishes boundaries for the robotics-assisted arm, so that the surgeon can balance the Knee joint and position components with greater precision.

The reported benefits of computer navigated TKR include better component positioning, improved patient satisfaction, superior clinical outcomes, lesser blood loss and lower blood transfusion rates. It also results in lesser post-operative inflammation which may reduce pain and swelling aiding early mobilization and recovery. One of the essential advantages of picking the Navio Surgical System is the simple fact that there is no specialized preparation for the procedure or surgery nor any post-operative recovery concerns. The framework, due to its CT free route approach gives the patient lower expenses and to a lesser extent, recuperation time.

The robot-assisted system eliminates the possibilities of human error and this leads to perfect alignment, leading to the longevity of the joint implant. It ensures lesser bone removal, preserves natural anatomy and facilitates better post-operative outcomes for the patient. It is equally beneficial for the young people who intend to return to their active lifestyle sooner and elderly people who are suffering from end stage arthritis.

Emphasizing on the importance of the use of NAVIO Robotics, Dr Aashish Chaudhry, Managing Director and Orthopaedic Surgeon, Aakash Healthcare Super Speciality Hospital said, "Robotic joint replacement surgery via NAVIO Robotics has numerous benefits over traditional joint replacement surgeries. The most important function is the bone conserving technology, as it helps in preserving natural anatomy. Surgeons are now able to operate with enhanced precision even in the most complex procedures and critical cases. Enhanced precision and lesser bone removal lead to less blood loss, painless surgery, faster surgery and quick recovery and other better post-operative outcomes for the patient. Robotic-assisted joint replacement is at a much higher level at many parameters than traditional joint replacement surgery."

After the earlier successes of larger complex systems in medical field, it is probable that progress in the next decade will be incremental rather than revolutionary, leading to many different smaller simple robotic systems across a wide range of applications. Robotic surgery is thus likely to see a change of direction but will become more clinically relevant.