Take action against your HAIR LOSS

INTRODUCING A GAME CHANGER IN HAIR TRANSPLANT SURGERY. **DR RUSSELL KNUDSEN** IS THE FIRST SURGEON IN THE SOUTHERN HEMISPHERE TO OFFER THE ARTAS ROBOT FOR IMPROVED RESULTS IN HAIR TRANSPLANT SURGERY. CAITLIN BISHOP REPORTS.

Hair transplant surgery using the Follicular Unit Extraction technique has just reached a new level of efficiency, effectiveness and innovation. Dr Russell Knudsen from the Knudsen Hair Transplant Clinic in Sydney has just introduced the first hair transplant robot in the southern hemisphere – one of only 100 in the world – to his clinic in Double Bay.

The ARTAS System uses sophisticated digital mapping and precision robotics to harvest thousands of healthy individual hair follicles from the scalp. Dr Knudsen then expertly transplants these follicles into the area of thinning hair.

The new-age approach to hair transplant surgery is a welcome addition to the ever-growing industry. In the past decade, the number of hair transplant procedures in Australia has doubled to almost 4,000 procedures annually. Statistics show two-thirds of men experience some hair loss by their mid-thirties, and 50 percent of men will see significant loss in hair thickness by age 50.

Hair transplant surgery… before ARTAS

Traditionally, hair transplant surgery has been performed using one of two harvesting techniques: the strip technique and Follicular Unit Extraction (FUE). The strip technique involves taking an ellipse of skin from the back of the head, which is then dissected under microscope magnification and the grafts are made from this. The excised strip is then closed with sutures, and patients are left with a fine line of scarring at the back of the head.

Comparatively, the FUE technique uses a small cylindrical punch - one millimetre in diameter - to drill out follicular unites one by one with a punch excision. This method is performed using a specialised drill, which can be operated manually or with the assistance of engine rotation.

Typically, the surgeon uses high definition imagery to extract each follicular unit without causing damage to the live hair follicle.

‘To manually perform the FUE technique - or even when using an engine-assisted drill - the procedure is tiring and demanding,’ Dr Knudsen explains. ‘It is more technical then the strip technique, and the grafts can be easily damaged, which lowers the growth potential after transplantation.’

Having said that, many patients choose to use the FUE technique, as they don’t want the linear scar at the back of the head. This is particularly the case in patients with short hair, or males with military style shaved head.

Strip and FUE only refer to harvesting of the donor hairs. Once the grafts are extracted, the follicles need to be prepared and then transplanted to the balding site. This needs to be done relatively quickly, as the extracted follicles have no blood supply and the faster they’re back in the scalp, the better for future growth.

Hair transplant surgery with ARTAS

The ARTAS robot takes over the extraction process and has been described as an “FUE game changer”. It can remove up to 1,200 hair follicles per hour, minimising the length of the procedure and reducing the transition time between extraction and transplantation.

‘Because FUE is a slower technique to perform than strip, it can take an experienced surgeon a significant amount of time to perform an FUE manually. With this comes fatigues and, in some cases, inconsistency,’ Dr Knudsen explains. ‘The robot protects against any inconsistencies, and its speed is comparable with the best surgeons in the world.’

‘The faster speed and increased accuracy of extraction is also very beneficial to the patient. They require less anaesthetic, the procedure takes less time and the results are more reliable,’ he adds.

By using digital mapping and precision robotics, the ARTAS can extract healthy hairs without causing damage to the follicle. This helps ensure long-term growth after replanting.

After the extracted hairs are transplanted to the balding site, the roots develop their own blood supply and begin to grow. New hairs are seen a few months after the procedure.

Directly following the procedure, Dr Knudsen applies a dressing to the micro¬wounds in the donor area and antibiotic cream. The holes usually heal over seven to 10 days following the operation leaving time white circular scars..

While the hair transplant operation is largely the same with the ARTAS, the new technology is the first step in a revolution of FUE hair transplant surgery. The ARTAS is setting new standards in the efficiency, consistency and reliability of FUE hair transplant surgery.

‘I waited to see the documented results of the ARTAS System before purchasing the robot,’ Dr Knudsen says. ‘I believe, in the hands of a skilled surgeon, the ARTAS will help answer the needs of many men who are desperate to overcome hair loss.’ **csbm**