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The vital tube carries urine from the bladder and out through the urethral meatus during urination, and from the sperm sacs during ejaculation in men.

[Urethral stricture](#) is the constriction of the urethra and several individuals with a stricture will have increasing discomfort while urinating. This is often caused by injury, surgery or infection around the urethra structures.

The Urologists at Edogawa Hospital have come up with a solution in the form of Boron Neutron Capture Therapy (BNCT), and this article takes a quick look into their exploits.

Urethral Stricture: BEES-HAUS Cell Therapy Approach

BEES-HAUS cell therapy, a unique autologous buccal mucosal cell-based technique disclosed by famous urologist Dr. Akio Horiguchi, might be used to treat urethral stricture. Dr. Akio has been able to demonstrate its simple replication in Japan, as well as cell engraftment techniques at the site of urethral injury and scarring. All these come together to ensure there's no stricture recurrence.

Dr. Dmitriy Nikolavsky of Upstate University Hospital in New York praised this approach when investigating urethral stricture. In addition, Dr. Suryaprakash Vaddi, who moderated its presentation on behalf of Edogawa hospital at the NCRM NICHE 2022, noted that BEES-HAUS had a favorable clinical result in six patients.

In the past decade, recurrences of [male urethral stricture](#) have been often reported despite several treatment forms. These forms usually range from invasive surgical urethroplasty with buccal mucosal patch, to minimally invasive endoscopic urethrotomy.

However, the BEES-HAUS cell treatment successfully relieves urethral stricture through a new polymer scaffold created by Japanese scientists. Using techniques like [cell culture process development](#) and morphological or immunohistochemic reconfirmation of cell engraftment, Edogawa hospital is preparing for a much larger study on urethral stricture.

Their presentation in AUA 2022 has now been sanctioned for publication in Stem Cell Reviews and Reports. In addition, their collaborators who were given a BEES-HAUS patents in Japan, have created an effective buccal tissue preservation solution. This procedure called the OPTRACT Method, functions to expertly move cells between labs and hospitals to support cell culture process.

Cell Engraftment: Urologists of Edogawa Hospital, Japan.

One of the best Urologists Japan has to offer in Dr. Akio Horiguchi, can be credited with this new approach to urethra stricture. Dr. Shojiro Katoh, President, Edogawa Hospital spared no praises for Dr. Akio Horiguchi and also celebrate the launch of his new book "Nyodokyosakusho."

The use of transplanted stem cells to limit the recurrence of urethra stricture, has made the Edogawa Hospital more keen on developing advanced medical research, technology and clinical skills. The Hospital has set its sights on a urethral reconstruction center, by developing Boron Neutron Capture Therapy (BNCT) for Cancer treatment.

Clinical trials for Breast cancer with BNCT are to begin in the coming years, making this healthcare destination more desirable by foreign patients. The hospital also intends to expand its support systems in order to accommodate incoming medical tourism.

Final Thoughts

Limiting cases of urethra stricture is only the first step to a much wider potential for clinical research and cell development by doctors in the hospital. However, further trials and testing is required to guarantee the efficacy of the BEES-HAUS cell therapy approach in total urethral stricture prevention.