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POSITION OF PROSTATIC ARTERY EMBOLISATION IN TREATING BPO- WHERE WE STAND IN 2023

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Prostatic artery embolization is being publicized as a non-surgical modality to treat Benign Prostatic Hyperplasia. It is included in various guidelines as an option to treat BPO

In our region, PAE has been used as a treatment option for BPH by practitioners from specialties other than interventional radiology and Urology. This is a synopsis of the current evidence on PAE and its position as a modality to treat LUTS due to BPO

The current standard of care of BPO:

Treatment of BPO is the part of a larger clinical pathway to treat LUTS in men. This pathway includes various conditions like urethral stricture disease and neurogenic bladder. The evaluation and correct diagnosis of these conditions depends on the experience of the clinician. This is the reason why, LUTS is managed by Urologist around the globe. Even the NICE guidelines stipulate that the patient should undergo a specialist evaluation before any form of intervention. The current standard of care for BPO is medical therapy followed by TURP or HoLEP. Experts have observed that being a common clinical syndrome with a significant sham effect, extreme caution should be exercised while considering any new interventional care for LUTS due to BOO. Hence TURP remains the standard of care for LUTS due to BPO till decades-long large-scale prospective multiregional trials bring us more evidence.

Position of various guidelines on PAE:

NICE and AUA guidelines have indeed included PAE as an option in their clinical pathway for the management of LUTS. According to NICE guidelines, the initial evaluation should be meticulous and should be done by a specialist. The healthcare system in UK is heavily audited and reviewed. In such a system, it is permissible for a newer modality to be tried with informed consent and adequate care. AUA has included PAE as a conditional recommendation(Grade C). EAU has observed weak evidence to recommend PAE as a treatment modality for BPO.

Scientific evidence on PAE:

Most of the studies on PAE are short-term and underpowered. All of the trials show that the PAE is less effective than TURP as far as most of the clinical endpoints are concerned. There is less improvement in symptom score and the residual prostate is more after PAE. There is some advantage for PAE since it has less retrograde ejaculation, post-procedural bleeding, and stricture rates. However, PAE may lead to non-targeted embolization, vascular injury, and radiation hazard. There have been adverse incidences like penile gangrene, embolization of Carcinoma of the Prostate, and embolization done for patients with stricture in the last five years. These are often not reported due to the uncontrolled nature of the clinical practice.

Conclusion:

The introduction of PAE into clinical practice should be done with caution. A Urologist should evaluate the patient before any intervention for LUTS due to BPO. The clinical pathways put forward by various Urology societies have to be followed while making a decision. The evidence on PAE will have to evolve with adequately powered and well-designed studies over the next decade. Till then, it cannot be considered as a standard of care for LUTS due to BPO. In our region, Urologists must lead the path by being active in clinical decision-making and monitoring the outcomes of patients undergoing PAE. The medical community should be made aware of the facts regarding the treatment of BPO through academic programs and publications.

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