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EDITORIAL

Quest for the best—A move to Anatomical Endoscopic Enucleation of the Prostate

The history of surgical enucleation for the treatment of lower urinary tract symptoms caused by benign prostatic enlargement dates back more than 100 years (Freyer, 1919). Open prostatectomy (OP) is an invasive procedure associated with high transfusion rates, long catheterisation time, and long hospital stay in spite of its capability to achieve complete removal of prostatic adenoma. As a result, the popularity of OP has declined after the advent of transurethral resection of the prostate (TURP). It is not surprising that TURP has been considered the standard surgical therapy to treat benign prostatic hyperplasia (BPH) for decades in view of its favourable safety profile and minimally invasive nature. Despite improvements in equipment and techniques over the years, morbidity and retreatment rates after TURP are still of concern, particularly in patients with a large prostate (Rassweiler, Teber, Kuntz, & Hofmann, 2006). The ongoing needs to perfect BPH-related surgery lead to advances in new technologies and refinement of current options. Among all the surgical options, anatomical endoscopic enucleation of the prostate (AEEP) is the most promising one.

The concept of surgical enucleation by an endoscopic approach was first described by Hiraoka in 1983 with the use of a monopolar system (Hiraoka, 1983). However, AEEP did not attract much attention from the urological world until holmium laser enucleation of the prostate (HoLEP) was introduced by Fraundorfer and Gilling in 1998 (Fraundorfer & Gilling, 1998). Since then, AEEP has undergone growing popularity due to its achievement of maximal adenoma removal with significantly less morbidity. HoLEP remains the most well-studied procedure in AEEP and has demonstrated its superior outcome efficacy, durability and safety (Gilling et al., 2012). Effort and data from researchers worldwide brought the acronym—Endoscopic Enucleation of the Prostate (EEP)—to the European Association of Urology Guidelines in 2016 (Gravas et al., 2016). Nowadays, AEEP continues to evolve rapidly and is not only limited to HoLEP. Various energy sources and a wide spectrum of operative techniques have been adopted by different surgeons with success. Nonetheless, anatomical enucleation is the core principle, which is shared by all the endourologists despite the variations.

While AEEP continues to flourish and becomes available in an increasing number of centres globally, numerous questions remain to be answered. In our quest for generating a wealth of scientific information, the Guest Editors have invited a panel of experts in the field to present the current best evidence on AEEP. The Special Issue involves a comprehensive list of chapters and offers a concise overview of AEEP in a systematic approach. Following the introduction from the historical and anatomical perspective (Reddy, Utley, & Gilling, 2020; Oh & Shitara, 2020), different techniques of AEEP by different energy source are illustrated (Ryang, Ly, Tran, Oh, & Cho, 2020; de Figueiredo, Cracco, de Marins, & Scoffone, 2020; Herrmann & Wolters, 2020; Rijo & Misrai, 2020). The surgical outcomes, with emphasis on postoperative continence and sexual functions, and complications of AEEP are summarised in the following chapters (Chen, Chung, Chu, Chen, & Ho, 2020; Lee, Cho, Juan, & Teoh, 2020; Cheng, Li, & Yu, 2020; Wei, Ke, Xu, & Xue, 2020) before a debate on AEEP as the next gold standard treatment for benign prostatic obstruction (Aho, Armitage, & Kastner, 2020; Wroclawski, Teles, & Carneiro, 2020). Finally, this Special Issue is rounded up by a discussion on surgical training (Teoh et al., 2020) and a survey on AEEP from urologists worldwide (Gudaru et al., 2020).

Since the awakening of the procedure 20 years ago, we witnessed the enormous development in every aspect of AEEP. Therefore, we believe that it is high time to summarise the advancement of the technique so far. This Special Issue serves as a firm foundation by compiling the achievements of researchers around the world and shedding light on generalisation of the technique of AEEP.

KEYWORDS

enucleation, prostate

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