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## ADVANCES IN HUMAN PENILE ANATOMY, ERECTION PHYSIOLOGY AND ITS CLINICAL APPLICATIONS FOR RESEARCHERS AND PHYSICIANS

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**O**ur chronologically protracted studies substantiate a model of the tunica albuginea of the corpora cavernosa in human penis as a bi-layered structure with a 360° complete inner circular layer and a 300° incomplete outer longitudinal coat (as opposed to just a singly uniform-complete-circular layer) spanning from the bulbospongiosus and ischiocavernosus proximally and extending continuously into the distal ligament within the glans penis. The anatomical location and histology of the human distal ligament invites convincing parallels with the animal Os penis within glans penis and therefore constitutes potential evidence of the evolutionary process. In the corpora cavernosa, a chamber design is responsible for facilitating rigid erections. It is an exclusive milieu to apply Pascal's law in the entire human body. Furthermore, one deep dorsal vein, two cavernosal veins and two pairs of para-arterial veins (as opposed to one single vein) are discovered between Buck's fascia and the tunica albuginea. For investigating its venous factors exclusively, hemodynamic studies have been performed on both fresh and defrosted human

male cadavers. In each case, a rigid erection was unequivocally attainable following venous removal. This clearly has significant ramifications in relation to penile venous-relevant surgeries and its role in treating impotent patients. These newfound insights into penile tunical, venous anatomy and erection physiology were inspired by and in turn enhance clinical applications routinely encountered by researchers, such as vascular physiology, vascular pathophysiology and erection mechanism as a mechanical event, and physicians in particularly surgeons, such as penile morphological reconstruction via autologous venous patched surgery, penile implantation with glans sinusoidal enhancement, penile venous surgery and even penile enhancement surgery in particular the glans penis and penile girth. All are mostly attainable via an acupuncture assisted local anesthesia on an ambulatory basis if the surgeons acknowledge this newfound anatomical knowledge.

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