

Andrology subspecialty: Training opportunities for Indian urologists

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Andrology is a medical specialty derived from the Greek word “Andros.” It deals with male reproduction and is the male equivalent of gynecology. Over the years, men’s sexual health was also included in andrology.

PROBLEMS AND IDENTITY CRISIS

Globally, most urology residents get limited exposure to andrology during their residency. A majority (80%) of Indian Urology residents have little exposure to andrology (<10% of the overall work).^[1]

Andrology laboratory technicians who report semen analysis also self-designate themselves as andrologists just because they “handle” sperms. Hence, it has become a norm to designate a urologist specialized in andrology as a “Uro-andrologist” and not just an “Andrologist” in reproductive medicine forums. Although the male factor is implicated as the case for infertility in nearly 50% of infertile couples, the role of clinical andrologists in the era of assisted reproductive techniques is underestimated.^[2] Evaluation of males is limited to just a basic semen analysis when various andrological treatment options such as hormonal management, management of sexual dysfunction, microscopic varicocele, microscopic vasovasostomy, and vasoepididymostomy may result in spontaneous pregnancy if the female partner is normal.^[3]

Furthermore, there is intense competition between urologists and plastic surgeons in doing penile implant surgery. Urologists are better experienced in managing intraoperative surgical complications such as urethral injuries, corporal perforations, and reservoir placement injuries such as bladder or iliac vessel injuries, and plastic surgeons have experience in neophallus penile implant placement.

CLINICAL ANDROLOGY: GLOBAL TRAINING OPPORTUNITIES

USA and Canada

The American Urological Association (AUA), in collaboration with the Society for the Study of Male

Reproduction, conducts the AUA Andrology Fellowship match program annually. Parallely, the Sexual Medicine Society of North America (SMSNA) conducts a fellowship match process. Overall, there are 33 andrology fellowship centers in the USA (as of July 2024), and only applicants who have completed urology residency are eligible to apply through the AUA and SMSNA websites.^[4,5] A total of 324 andrology fellows had completed fellowship between 1982 and 2020; female residents comprised 16.4%.^[6]

The Canadian Urological Association lists three Canadian centers offering andrology fellowships of 1–2 years’ duration. The American Society of Andrology was founded in 1975 but mainly offers educational programs related to male reproduction and does not offer clinical fellowship training.

Europe

Unlike in the USA, where fellowship-trained urologists predominantly practice andrology, andrology practice in Europe is varied. The “Andrologist” designation in Europe is used by urologists, gynecologists, endocrinologists, and dermatologists. Non-urologists practicing andrology in Europe restrict themselves to male infertility care, hormonal treatments, and genital infections. They are unlikely to venture into surgical andrology such as penile implant surgeries and Peyronie’s plaque surgeries. The European Academy of Andrology (EAA) has an 18–24-month training program in clinical andrology in association with the European Association of Urology (EAU).^[7] The candidate has to clear an exit examination in clinical andrology (seminology, endocrinology, microbiology, imaging, morphology, urology, gynecology, immunology, and psychology) after completion of 18 months of training and is awarded a certificate from EAA.

The EAU offers scholarships, such as short visits (2–3 weeks), 1-year scholarships, and clinical visits (6–12 weeks). The applicant must first contact the host center where he/she wishes to do his/her andrology training and obtain a letter from the host institute to apply for scholarships.^[8] The European Society for Sexual Medicine (ESSM) started the ESSM Penile Implant Fellowship in 2018, which was discontinued after a few years. Currently (2024), the

ESSM Surgical Academy offers a surgical training program for urologists on a 3-level training process: level 1 (live webinars), level 2 (books and videos), and level 3 (2-month hands-on training) at selected centers of excellence in Europe.^[9]

Asia

Registered societies/organizations in urology and sexual medicine from Asia have not listed any andrology fellowship programs. One Australian center has been offering a one-year andrology fellowship for the last few years. A few South Korean, Singaporean, Chinese, and Indian centers offer observership opportunities, but there are no dedicated structured andrology fellowship programs for urologists.

AUTHORS SUGGESTIONS

Urologists who want to get fully trained in andrology may choose either of the two tracks:

1. Do short-term clinical visits at two-to-three high-volume centers (each 3-month duration) over 1–2 years, preferably with some hands-on training/assistance. One center may offer high-volume prosthetic urology (penile implants and artificial urinary sphincter), another may offer advanced penile reconstructions, and the third may offer exclusive male infertility services and microsurgies, or
2. Do long-term (1–2 years) andrology fellowship at a single center that does both male infertility and men’s sexual health interventions.

The best societies to look forward to for andrology training opportunities/funding/grants for urologists are the AUA, SMSNA, EAU, International Society for Sexual Medicine, and ESSM. All these societies expect the applicant to be a member of their society for some time (1–2 years) before applying for fellowships. The ideal time to start applying for fellowships is at the end of the second year of urology residency so that the fellowship starts immediately after urology residency. Applicants with a good number of PubMed-indexed publications and H-index are highly considered. Attending cadaveric hands-on workshops and live operative workshops may improve surgical confidence levels.^[10]

The applicants should preferably have a “return plan” about where they will establish their andrology practice after returning home with their completed fellowships. Initially, along with the andrology work, the andrology fellowship-trained andrologist/urologist could continue doing general urology work, such as stones and prostate, which continue to be the breadwinners for any young urologist in India. Once the andrology patient load reaches good numbers, one can relinquish the general urology work based on personal preferences. It is an added luxury

if the hospital also has an IVF laboratory so that male infertility work, such as surgical sperm retrievals and sperm cryopreservation, is better coordinated with the in-house reproductive gynecologists and embryologists for better patient outcomes.

REFERENCES

1. Tamhankar AS, Sabnis R, Gautam G. Are we ready for urological subspecialty-based practice in India? The resident’s perspective. *Indian J Urol* 2019;35:54-60.
2. Mulawkar PM, Maheshwari PN, Agrawal SG. Clinical andrologists: Do we really need them in the era of ART? *J Hum Reprod Sci* 2021;14:105-12.
3. Krishnappa P, Manfredi C, Jayaramaiah S, Ditunno F, Matippa P, Shah R, *et al.* Unconsummated marriage: A systematic review of etiological factors and clinical management. *J Sex Med* 2023;21:20-8.
4. Fellowship Societies, American Urological Association. Available from: <https://www.auanet.org/membership/membership-committees/residents-and-fellows-committee/fellowships>. [Last accessed on 2024 Aug 12].
5. Program Eligibility, Sexual Medicine Society of North America (SMSNA). Available from: <https://www.smsna.org/fellowship>. [Last accessed on 2024 Aug 12].
6. Lau B, Bole R, Ziegelmann M, Köhler T, Helo S. Current landscape of andrology fellowship programs and the effect of gender on post-fellowship practice patterns. *Urology* 2022;166:98-103.
7. Andrology centres accredited by the European Academy of Andrology. *Andrology* 2022;10:10-96. Available from: <https://onlinelibrary.wiley.com/doi/10.1111/andr.13245>.
8. European Urology Scholarship Programme (EUSP). Available from: <https://uroweb.org/education/scholarships>. [Last accessed on 2024 Aug 12].
9. ESSM Surgical Academy. Available from: <https://www.essm.org/education/essm-academy/essm-surgical-academy/>. [Last accessed on 2024 Aug 12].
10. Krishnappa P, Srini VS, Shah R, Lentz AC, Garaffa G, Martinez-Salamanca JJ, *et al.* Cadaveric penile prosthesis workshop training improves surgical confidence levels of urologists: South Asian Society for sexual medicine course survey. *Int J Urol* 2020;27:1032-7.


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