



# European association of urology guidelines for sexual and reproductive health 2020: what is new?

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The European Association of Urology Guidelines has initially been published in 1996 and 4 years later, the sections on ejaculation disorders and erectile dysfunction (ED) were included. Since then, each year these sections have been updated by specialists from different European countries. After the significant revisions on premature ejaculation (PE) section, the text was renamed to “EAU Guidelines on Male Sexual Dysfunction” in 2009. In 2011 and 2014, sections on penile curvature and priapism have been included and the “Male Sexual Dysfunction” guideline maintained until 2019 [1]. In 2020, the guidelines on male sexual dysfunction, male infertility, hypogonadism, and penile curvature were gathered in a single chapter entitled “Sexual and Reproductive Health (SRH)” with extensive content that is worth consulting.

The guidelines on “SRH” include a lot of novelties that can revolutionize our daily practice. One of the most important changes is abandoning the “step-wise” approach in the management of ED. In the previous versions, patients with ED were offered phosphodiesterase type 5 inhibitors (PDE5is) initially (first-line therapy) and those who were not responding to these oral medications were offered intracavernosal injections, intraurethral/topical alprostadil,

vacuum erection devices (VED), and shock wave therapy (Li-SWT) (second-line therapy). Penile prosthesis implantation constituted the third-line therapy for ED patients who do not respond to first- and second-line therapies. Considering the fact that a significant number of patients prefer a permanent solution (e.g., penile prosthesis) for their ED problem [2], this step-wise approach has been discarded and patients were given the opportunity of selecting the treatment which suits them the most after they are being informed about all the available treatment modalities. This novel decision-making approach is a more realistic alternative to the traditional three-level concept and it has been adopted by the most recent AUA guidelines as well [3].

Another novelty in the management of ED patients is recommending the use of Li-SWT as a first-line therapy alternative to PDE5is in fully counseled patients [4]. The previous version of the guideline was limiting the use of this treatment in mild organic ED patients or poor responders to PDE5 inhibitors [5].

Unlike previous versions, the SRH 2020 guidelines acknowledge that there is inadequate data to support the use of any specific regimen for penile rehabilitation after radical prostatectomy [6] and suggests early initiation of pro-erectile treatments after radical prostatectomy [7]. However, the strength of the recommendation grading is weak.

Male hypogonadism is one of the most updated chapters in the SRH Guidelines. Initially, the classification of male hypogonadism table has been comprehensively updated. More importantly, a nomenclature alteration has occurred as adult-onset hypogonadism is now called late-onset hypogonadism (LOH). The diagnostic evaluation of LOH has been extensively discussed and a figure of detailed diagnostic algorithm has been added. More importantly, the threshold levels of total and free testosterone have been provided as recommendations to diagnose LOH. Afterwards, the treatment options and follow-up strategies have been discussed comprehensively and several new recommendations have been offered accordingly.

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Disorders of Ejaculation chapter used to be a subheading of Male Infertility Guidelines. It has, now, become a separate chapter in the SRH Guidelines. PE is the major title along with the other ejaculation disorders including retarded/delayed ejaculation, anejaculation, painful ejaculation, retrograde ejaculation, anorgasmia, and haemospermia [8]. Although there are not many changes in PE section except for new psychosexual recommendations for the assessment and treatment of PE, the SRH 2020 guidelines acknowledge the management algorithm for haemospermia and made recommendations for the management of recurrent haemospermia. Briefly, it recommends taking a detailed medical history and performing a physical examination, underlining the fact that men older than 40 years of age must be screened for prostate cancer. Noninvasive imaging modalities (e.g., transrectal ultrasound, magnetic resonance imaging) can be considered in men  $\geq 40$  years of age or men of any age with persistent or refractory haemospermia whereas invasive methods (e.g., cystoscopy and vesiculoscopy) should be reserved when they are inconclusive.

It is the first time “Low sexual desire (LSD) and male hypoactive sexual desire disorder” chapter was included in EUA Guidelines. In this chapter, these two entities reviewed along with their risk factors, diagnostic work-up, and management options. Although weak recommendations were in dominance for the treatment of LSD, performing laboratory tests to rule out endocrine disorders and replacing testosterone in case of LSD linked with testosterone deficiency were the strong recommendations.

Diagnosis and management of penile curvature are another one of the revised parts of the EAU Guidelines. First, a detailed genetic background was provided for Peyronie’s disease (PD). Besides, previous guidelines did not recommend the use of intracavernosal injection in the evaluation of patients with PD. However, the novel guidelines underline the superiority of measuring the penile curvature degree after intracavernosal injection to provide an objective assessment of penile curvature with an erection [7]. Para-aminobenzoate was added to the list of non-recommended oral treatments [9]. Similar to collagenase treatment, intralesional therapy with interferon alpha-2b started to be offered to PD patients with stable dorsal or lateral curvature greater than 30 degrees [10]. Considering the recent papers which report promising results [11, 12], penile traction devices and VED started to be offered to PD patients to reduce penile deformity (or as part of a multimodal therapy approach). In addition to oral treatments (nonsteroidal anti-inflammatory drugs and PDE5is, Li-SWT started to be recommended to reduce penile pain in the acute phase of PD [13]; however, its use in improving penile curvature and reducing plaque size was acknowledged as limited. Recommendations regarding the surgical treatment of PD have also been expanded to include sliding

techniques [14], with an important warning that these surgical techniques are associated with the risk of devastating complications such as glans necrosis. Moreover, using synthetic grafts for reconstructive surgery is no longer recommended.

Male infertility chapter is now included in the SRH Guidelines and several updates have been made. DNA fragmentation section has been expanded and recommendations related to genetic testing in infertile men have been revised. Accordingly, Y-chromosome microdeletion maintained mandatory when sperm concentration of less than 1 million sperm/mL. Regarding the special conditions and relevant clinical entities pertained to male infertility, there are some changes standing out. For cryptorchidism, it is strongly recommended that orchidectomy should be offered to men with unilateral undescended testis and normal hormonal function/spermatogenesis. In addition, in case of unilateral or bilateral orchidectomy with biochemical hypogonadism and/or spermatogenic failure orchidopexy option is brought forward. For germ cell malignancy and testicular microcalcification (TM), the strength rating of indications for testicular biopsy in infertile men with TM has been changed from strong to weak. New recommendations about semen preservation have also been added. For varicocele, the strength rating of the statement “Do not treat varicocele in infertile men who have normal semen analysis and in men with a subclinical varicocele” has been changed from strong to weak. Besides, varicocelectomy may be considered in men with raised DNA fragmentation with otherwise unexplained infertility or who have suffered from failure from assisted reproductive techniques (ART) [15], including recurrent pregnancy loss, failure of embryogenesis, and implantation failure. Noninvasive male infertility management including empirical and hormonal therapies has exclusively updated. A new section summarizing the ART has been added as well [7].

Definitely, the EAU guidelines 2020 are mandatory reading, for beginners and experts on the subject, if you want to find something really new in this document so consulted by urologists from all over the world.

## Compliance with ethical standards

**Conflict of interest** The authors declare that they have no conflict of interest.

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