Andrology and fertility

Premature ejaculation-operative management after failure of conservative treatment

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\textbf{ABSTRACT}

We report 1 case of microsurgical denervation of penis in men with lifelong premature ejaculation after failing to be treated conservatively. Although premature ejaculation is the most common sexual dysfunction in men, it is not well studied. Our aim was to investigate Micro-surgical denervation of penis (MSDP) as a method of treatment in men with lifelong PE after failure of different conservative treatment and to analyse the results. Much improving of ejaculatory control, distress, bother and IELT were identified from PEDT and PEP questionnaires. Furthermore investigations are needed to prove the role of operative treatment in men with lifelong PE.

\textbf{Introduction}

Although premature ejaculation (PE) is the most common sexual dysfunction in men, it is not well studied. Our aim was to investigate Micro-surgical denervation of penis (MSDP) as a method of treatment in men with lifelong PE after failure of different conservative treatment and to analyse the results.

\textbf{Case presentation}

1 case of microsurgical denervation of penis was performed in 23 year old man with lifelong premature ejaculation after failing to be treated conservatively. The patient was receiving SSRI on demand treatment for 6 months and was using topical anesthetics also for 3 months without any sufficient effect. The patient was followed up for 12 months to assessed the long term efficacy of the method. Evaluation of penile sensitivity was performed at 6 and 12 months after the operation, also Premature ejaculation diagnostic tool (PEDT), Premature ejaculation profile (PEP),International index of erectile function-5 (IIEF-5) were identified.

Before operation, the patients underwent the so-called "Lidocaine test" by making at least 3–5 sexual intercourse using a condom with an anesthetic or lidocaine spray 15–30 min before sexual intercourse. If in these cases an increase in the time to reach ejaculation and erection satisfies the patient, it is considered that the test is positive and can proceed to surgery.

The method we used consisted in a circular incision on the skin at the level of the Corona glandis, with subsequent disaggregation and immobilization of the skin of 4–5 cm to the base of the penis, which gives us access to free sensory nerve branches of n. dorsalis penis. In the main type of innervation, when the diameter of the nerves is 2–3 mm after their interruption, both ends are sutured with 7/0 polypropylene of an intrafascicular thread. With a reticular type of innervation, when there are multiple nerve endings of up to 0.5 mm in size, the imposition of suturing is impossible. In this case, an interruption of the maximum number of nerves is applied without their recovery. The operative intervention ends with the Circumcision in order to improve the effect of MSDP. The operation is performed with the use of magnifying glasses with a four-fold increase [Fig. 1]. As a result of the surgical intervention, anesthesia of the glans penis has occurred and the initial recovery of the normal sensitivity appears after 2–3 months. The complete recovery of sensitivity is achieved within 6–8 months after surgical procedure. Such temporary exclusion of the peripheral unit of the ejaculatory reflex results in a significant increase in the number of frictions and the time to ejaculation. It allows the patients to develop a sustained tendency for a normal duration of sexual contact through the possibility of suppression and better control over ejaculation due to reduced peripheral stimulation.

Clinical course: The mean PEDT score was 19 preoperatively and goes down to 9 at 6-th mounth timepoint and respectively to 7, 12 months after surgery, showing the possible absence of symptoms of premature ejaculation. The mean IIEF-5 score was 23 before MSDP and...
remains with no significant change to 22 at 6 and 12 months post-operatively. Much improving of ejaculatory control, distress, bother and Intra ejaculatory latency time (IELT) were identified from PEP questionnaire. Evaluation of penile sensitivity was performed and significantly decreasing was observed of touch, vibration and temperature stimuli. Postoperative complications were: oedema of the glans penis and also a short bleeding, which were resolved by itself, without any additional procedures.

The patient returns to his normal sexual activity 3 weeks after surgery. He was advised to have at least 3 or 4 sexual intercourses per week, so he can build sustainable skills and a reflex to hold his ejaculation because of reduced peripheral stimulation of glans penis.

Discussion

Microsurgical denervation of penis is a statistically significant much more effective method in terms of improving the symptoms and ultimate satisfaction in lifelong premature ejaculation compared to circumcision, whose effect is comparable to placebo. The IELT was increased up to 6 fold in the patients underwent denervation surgery. In terms of patient satisfaction from Brief male sexual function inventory (BMSFI) questionnaire, there is no significant difference between the two groups of patients.

Another experimental technique of CT guided cryoablation of the dorsal nerves of the penis, shows that is safe, feasible, single-day outpatient procedure, that improving much the symptoms of premature ejaculation and can be used as alternative method of treatment.

Conclusions

Micro-surgical denervation of penis is highly efficacious operative technique to cure the symptoms in men with lifelong PE and can be used as an alternative method after failure of conservative treatment. Decreasing penile sensitivity gives better control over ejaculation and increase IELT. Furthermore investigations are needed to prove the role of operative treatment in men with lifelong PE.

Conflicts of interest

The authors declare that they have no competing interests.

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