

## ORIGINAL ARTICLE

## LEVOSULPIRIDE IN PREMATURE EJACULATION

Syed Javid Hussain, Atif Hameed, Hassan Shahzad Nazar\*, Ania Javid\*\*, Yousaf Shah\*,  
Waqas Hameed\*, Muhammad Shah Miran

Department of Endocrinology, \*Medicine, \*\*Obstetrics and Gynaecology, Ayub Medical College Abbottabad, Pakistan

**Background:** Premature ejaculation is one of the most common sexual disorders. A large number of treatment options have been used so far for the treatment of this dysfunction and still a large number of experts are doing research in this field. Here we have tried to research on the beneficial effects of levosulpiride in the treatment of PE. **Methods:** Eighty-eight patients from different areas of Hazara division suffering from PE were chosen. Sixty-four patients were given levosulpiride and the remaining 24 patients were given Placebo. **Results:** Out of 64 patients who have been given levosulpiride, 30 patients showed very good improvement, 14 patients showed some improvement, 14 patients showed little and 06 patients showed no improvement. **Conclusion:** levosulpiride have very good beneficial effects in the treatment of PE.

**Keywords:** levosulpiride, premature ejaculation

## INTRODUCTION

Premature ejaculation (PE) is a condition in which a man ejaculates earlier than he or his partner would like him to. Premature ejaculation is also known as rapid ejaculation, rapid climax, premature climax, or early ejaculation. Masters defines PE as the condition in which a man ejaculates before his sex partner achieves orgasm, in more than fifty percent of their sexual encounters. Other sex researchers have defined premature ejaculation as occurring if the man ejaculates within two minutes of penetration; however, a survey by Alfred Kinsey in the 1950s demonstrated that three quarters of men ejaculate within two minutes of penetration in over half of their sexual encounters.<sup>1</sup> Self reported surveys shows up to 75% of men ejaculate within 10 minutes of penetration. Today, most sex therapists understand premature ejaculation as occurring when a lack of ejaculatory control interferes with sexual or emotional well-being in one or both partners. Now researchers have begun to form a quantitative definition of premature ejaculation. Current evidence supports an average intra-vaginal ejaculation latency time (IELT) of six and a half minutes in 18-30 year olds.<sup>2</sup> If the disorder is defined as an IELT percentile below 2.5, then premature ejaculation could be suggested by an IELT of less than about 2 minutes. Nevertheless, it is well accepted that men with IELTs below 1.5 minutes could be "happy" with their performance and do not report a lack of control and therefore would not be defined as having PE.<sup>3</sup> On the other hand, a man with 2 minutes IELT may have the perception of poor control over his ejaculation, distressed about his condition, has interpersonal difficulties and therefore be diagnosed with PE. Most men experience Premature Ejaculation at least once in their lives. PE has been traditionally considered a psychological defect. But in recent years many organic causes have been found, identified locally in the penis and in central or peripheral nervous system.<sup>4</sup>

Consequently a pharmacological way of reliving has been researched and some drugs, as fluoxetine, paroxetine, clomipramine etc. have been used with various results. We wish now to research on the beneficial effects of levosulpiride, an anti-dopaminergic drug in this field.<sup>5</sup>

## MATERIAL AND METHODS

This study was conducted at the Department of Endocrinology, Ayub Teaching Hospital Abbottabad. Eighty-eight patients from different areas of Hazara Division were chosen who had been suffering from PE at least for the last 5 years. Patients suffering from erectile dysfunction were not included in the study. The patients' age ranged between 16 and 35 years, with a mean of 24.1 years. After having informed consent, we carefully examined their medical history. Twenty-four patients with comparable mean age were chosen as controls and were treated with placebo only. The remaining 64 received 50 mg of the Levosulpiride once a day for 60 days. They were taught to record their latency times with a stopwatch and to report any incidental side effect. After 60 days the patients were followed up.

## RESULTS

In 64 patients who used Levosulpiride, very good improvement that was an improvement more than 500% in the latency time, i.e., 5 minutes. We noted that this was largest group, since 30 (46.88%), 14 (21.87%) patients showed some improvement, i.e. 3 minutes, 14 (21.87%) showed little improvement with latency time of 1-1.5 minutes and remaining 6 (9.38%) which were non-responder showed less than 1 min (Table-1).

Twenty-four patients were placebo out of which 9 (37.5%) reported a very little improvement and the remaining 15 (62.5%) had no improvement at all (Table-2). Only 6 patients referred a fall in their libido, which was assumed as a potential side-effect.

**Table- 1: Outcome of treatment with Levosulpiride**

Outcome of treatment	Cases	Percentage
Good improvement	30	46.88
Some improvement	14	21.87
Little improvement	14	21.87
No improvement	6	9.37

**Table-2: Outcome of treatment with Placebo**

Outcome of treatment with placebo	Cases	Percentage
Very little improvement	9	37.5
No improvement	15	62.5

## DISCUSSION

The physical process of ejaculation requires two sequential actions: emission and expulsion. The emission phase is the first phase. It involves deposition of seminal fluid from the ampullary vas deferens, seminal vesicles, and prostate gland into the posterior urethra. The second phase is intermittent relaxation of external urethral sphincters.<sup>6</sup> A large number of factors contribute to PE such as: Stress and anxiety, Abnormal hormone levels, Negative reactions from one's sexual partner, Early childhood experiences, Illness such as diabetes or hypertension, Certain medications etc.

In mundane cases, treatments are focused on gradually training and improving mental habituation to sex and physical development of stimulation control. In clinical cases, various medications are being tested to help slow down the speed of the arousal response. Dapoxetine is a short-acting selective serotonin reuptake inhibitor (SSRI) marketed for the treatment of premature ejaculation. Dapoxetine is the only drug with regulatory approval for such an indication. Currently, it is approved in several European countries, including Finland, Sweden, Portugal, Austria and Germany also. Masters and Johnson recommended a start and stop technique to increase the time until ejaculation.<sup>7</sup> This requires a great deal of couple cooperation and communication, and may be difficult for some. Another method is control instead of prevention. Performing routines such as Kegel exercises<sup>8,9</sup>, which relate to gaining voluntary control of the Pelvic muscle and thus give a person more control over ejaculation. One more method is entitled intracavernous pharmacotherapy. This is a method of injecting a drug known as a vasodilator directly into the penis to help men control premature ejaculation and maintain their erection.

The solution not commonly known but practiced by some men for longer lasting intercourse, is the pre-sex preparation. The process is to ejaculate either through masturbation or intercourse preferably briefly. Wait the expulsion phase. It involves closure of bladder neck,<sup>10,11</sup> followed by the rhythmic contractions of the urethra by pelvic-perineal and bulbospongiosus for approximately 30 minutes or longer (from when you first ejaculated) until you can gain your second erection. Once you have gained your second erection, this should allow you to have intercourse for longer without

suffering from premature ejaculation. Some type of desensitisation cream, sprays and condoms are also frequently used for this disorder.<sup>12,13</sup>

While working at the department of endocrinology for the last many years different treatment options are focused for the treatment of PE. To maximise the benefits of medications and behavioural techniques in the management of premature ejaculation it is important to have a comprehensive approach to the problem.<sup>14</sup> A thorough sexual history and assessment of general health, psychological defects such as anxiety, depression etc. and other sexual problems (if any) are very important.<sup>15,16</sup>

## CONCLUSION

Levosulpiride have a role in enhancing sexual arousal and in lowering the ejaculatory threshold, so based on the abovementioned results we can say that this drug is quite beneficial in the treatment of very some male sexual problems like PE.

## REFERENCES

1. Master VA, Johnson PJ. Ejaculatory physiology and dysfunction. *Urol. Clin. North Am.* 2001;28(2):363–75.
2. Kinsey A, Pomeroy W, Martin C, & Gebhard P. *Sexual Behaviour in the Human Male*, Philadelphia: Saunders (1953); ISBN978-0253334114.
3. Ejaculation delay: what's normal? Bandolier Books. <http://www.medicine.ox.ac.uk/bandolier/band137/b137-4.html>. Retrieved 2007-10-21.
4. Waldinger MD, Quinn P, Dilleen M, Mundayat R, Schweitzer DH, Boolell M. A multinational population survey of intravaginal ejaculation latency time. *J Sexual Med* 2005;2(4):492–7.
5. Waldinger MD, Zwinderman AH, Olivier B, Schweitzer DH. Proposal for a definition of lifelong premature ejaculation based on epidemiological stopwatch data. *J Sexual Med* 2005;2(4):498–507.
6. Robert L. Marrone, *Body of knowledge: an introduction to body/mind psychology*. Place of Publication: SUNY Press; 1990, p. 104.
7. Böhlen D, Hugonnet CL, Mills RD, Weise ES, Schmid HP. Five meters of H<sub>2</sub>O: the pressure at the urinary bladder neck during human ejaculation. *Prostate* 2000 44(4):339–41.
8. Master VA, Johnson PJ. Ejaculatory physiology and dysfunction. *Urol Clin North Am* 2001;28(2):363–75.
9. deGroat WC, Booth AM. Physiology of male sexual function. *Ann Intern Med* 1980;92 (2 Pt 2): 329–31.
10. Truitt WA, Coolen LM (2002). Identification of a potential ejaculation generator in the spinal cord. *Science* 2002;297(5586):1566–9.
11. Coolen LM, Olivier B, Peters HJ, Veening JG. Demonstration of ejaculation-induced neural activity in the male rat brain using 5-HT1A agonist 8-OH-DPAT. *Physiol Behav* 1997;62(4):881–91.
12. *Premature Ejaculation. Premature Ejaculation and Male Orgasmic Disorder*. Armenian Medical Network 2006. <http://www.health.am/sex/premature-ejaculation/> Retrieved 2007-09-19.
13. Kendirci M, Salem E, Hellstrom WJ. Dapoxetine, a novel selective serotonin transport inhibitor for the treatment of premature ejaculation. *Ther Clin Risk Manag* 2007;3(2):277–89.
14. PPD Reports First Quarter 2009 Financial Results. Available at: <http://investor.ppd.com/releasedetail.cfm?releaseid=492822>

15. Janssen-Cilag EMEA announces receipt of first regulatory approvals for Priligy for PE in Finland and Sweden, February 11, 2009. Available from: <http://www.tradingmarkets.com/site/news/Stock%20News/2170588/>
  16. Sidi AA, Cameron JS, Dykstra DD, Reinberg Y, Lange PH. Vasoactive intracavernous pharmacotherapy for the treatment of erectile impotence in men with spinal cord injury. *J Urol* 1987;138(3):539–42.
- 

**Address for correspondence:**

**Dr. Syed Javid Hussain**, Department of Endocrinology, Ayub Medical College, Abbottabad. **Cell:** +92-300-9110637

**Email:** temptationsno1@hotmail.com