

# Phosphodiesterase Inhibitor (Sildenafil) in the Management of Honey Moon Impotence

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## Abstract

**Background and Aims:** Honeymoon impotence or first night erectile dysfunction (ED) is one kind of psychogenic ED which is not uncommon. Prevalence of this kind of ED is higher in conservative communities especially the Muslim population. We assessed the role of Sildenafil, a phosphodiesterase inhibitor (PDE-5) in the management of honeymoon (psychogenic) impotence.

**Methods:** All patients having erectile dysfunction (ED) after marriage with normal nocturnal erections were enrolled in this prospective study from 01-09-2006 to 31-08-2008. Reassurance & Sildenafil 100 mg at bed time was given to every patient and dose reduced to 50 mg after 3 successful intercourses. Patients who did not respond to PDE-5 inhibitor (3 doses), were given intracavernosal injection alprostadil and shifted to PDE-5 inhibitor after successful intercourse.

**Results:** Total number of patients was 45 with age range of 20-39 years. Mean duration elapsed before seeking medical advice was 10±14 days. Eighty percent patients had successful intercourse on first dose of Sildenafil with 95% confidence interval (CI) and 13% patients responded to 2<sup>nd</sup> dose of Sildenafil. Twelve percent patients suffered mild, well tolerable complications.

**Conclusions:** Honeymoon impotence is not an uncommon condition in some special population. Sildenafil proved to be effective, with high success rate and few tolerable complications.

**Keywords:** Honey Moon Impotence, Erectile Dysfunction, Phosphodiesterase Inhibitors (PDE-5), Alprostadil

## Introduction

To achieve a normal erection, adequate function of four organ systems must be present. These are vascular, neural, psychogenic and endocrine system. Erectile dysfunction (ED)/impotence is a common problem that affects 10-15% of adult men (1, 2). ED is either organic or psychogenic (3).

Psychogenic ED is defined as persistent inability to achieve and or maintain an erection satisfactory

for sexual performance owing predominantly or exclusively to psychological or interpersonal factors (4). Honeymoon impotence or first night ED is one kind of psychogenic ED which is not uncommon.

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Prevalence of this kind of ED is higher in conservative communities like Middle East, Fareast and especially the Muslim population (5). 10-15% of patients, who suffer ED, are of honeymoon impotence. As a form of psychogenic ED, first night failure in most instances is due to performance anxiety setting the vicious circle of fear and failure (6). These males not only fear embracement with their wives but also possible humiliation with the bride's family (7).

Sex therapy, phosphodiesterase (PDE-5) inhibitors, intracavernosal injections and anti-anxiety medications are various types of treatment modalities for this first night ED, with variable success (8, 9).

Sex therapy requires a level of understanding, cognitive ability to conceptualize the problem and challenge its basis. The central acceptance of joint couple therapy, which is the mainstay of sex therapy, is greatly compromised in our population and for many in developing Muslim word.

PDE-5 and intracavernosal injections are frequently used in these patients with a success rate of 72%-93% (8-11).

A prospective study was planned to evaluate the first night impotence and role of PDE-5 inhibitor (Sildenafil) in its management with the objectives of evaluating the efficacy and safety of PDE-5 inhibitor (Sildenafil) in the management of honeymoon impotence.

## Materials and Methods

Study was conducted at Department of Urology Allied Hospital, Faisalabad, Department of Urology University Medical College, Mian Muhammad Trust Hospital, Faisal Hospital Faisalabad and Aiesha Clinic Jaranwala. Duration of study was two year (01-09-2006 to 31-08-2008).

All patients of honeymoon impotence during a period of two years were included in the study (ED in their first few coital practices after marriage).

### **Exclusion Criteria:**

Patients reporting no spontaneous night time erections for more than 3 months, penile anatomical defects, major psychiatric disorders, history of chronic alcohol intake or other substances abuse, poorly controlled Diabetic Mellitus (DM), hepatic or renal insufficiency, premature ejaculation (primary) or other sex problems, and having any contraindication for sex, were excluded from the study.

All patients were subjected to history of previous marriage or sexual intercourse, trauma to penis or genitalia, erection status before marriage, history of psychogenic trauma or illness and general debilitating disease or drug intake. Physical examination of patient with special emphasis on external genitalia and hair distribution in face, beard and suprapubic area was performed. Urine analysis, complete blood picture, blood sugar, cholesterol, triglycerides, creatinine, testosterone and prolactin levels were performed in each case.

All patients were reassured and oral PDE-5 inhibitor, Sildenafil 100 mg at night was given. Dose of Sildenafil, was reduced to 50 mg after 3 successful intercourses and vitamin E 400 OD capsule in the form of placebo was added to the treatment. Treatment with 50 mg Sildenafil was stopped after two weeks.

Those patients who did not respond to oral PDE-5 inhibitor (3 doses) were given Alprostadil injection intracavernosal and after two successful intercourses were shifted to oral Sildenafil, according to the schedule already described.

Success or failure was recorded along with any untoward affect like headache, palpitation, myalgia, backache, dyspepsia, hematoma and priapism. Data were tabulated and analysed by applying Z-test and confidence interval (CI) were given.

## Results

Total number of patients was 45. Mean ( $\pm$  SE) age of patients was 27 ( $\pm$  4) years with a range of 20 years to 39 years. Majority of patients (82%) were in the age range of 20-30 years.

Mean ( $\pm$  SE) duration elapsed before seeking medical advice was 10 ( $\pm$  14) days with a range 1-75 days (Table 1). Fifty three percent patients belonged to urban area and 46% to rural area. Five patients (11%) have beard and were very strict in observing salats, Roza. These patients were in the habit of avoiding Television, Cinema and audiovisual media.

Strangely enough, although majority (n=43) patients have ED in their first marriage, 2 patients suffered honeymoon ED in their 2<sup>nd</sup> marriage with normal past sexual history. Thirty six (80%) passed obstacle on taking first dose of Sildenafil, with 95% CI (0.683, 0.917) (Table 2). Six patients performed satisfactory inter course on 2<sup>nd</sup> dose with 95% CI (0.359, 0.975). In 3 Alprostadil injections were given and after satisfactory intercourse were shifted to Sildenafil. Twelve percent complained of complications which were mild and well tolerable. These were headache, palpitation, myalgia and backache.

## Discussion

Honey moon impotence is common problem of conservative developing world communities (5, 6). Actually most western newlyweds have little to fear,

**Table 1.** Duration elapsed before getting medical treatment (Days)

Sr. No	No. of days	No. of patients	Percentage
1	1-5	24	53.3
2	6-10	9	20.0
3	11-20	7	15.6
4	21-30	3	6.7
5	31-75	2	4.4

because their first sexual encounter is probably but a distant memory, when they walk down the aisle. But the honeymoon impotence is apparently common among males who are virgins when they marry.

The religious and cultural mores in these conservative societies discourage sex before marriage (5). Virginity until marriage is still a matter of honor on part of the bride and groom. Most couples expect to have their first sexual experience on their, wedding night. Although this makes their wedding night a special memorable event, but this causes heavy psychological stress on both parties. Males at their failure not only fear embarrassment with their wives but also possible humiliation with bride's family.

The cultural acceptance of couple therapy, the mainstay of sex therapy treatment is greatly compromised in our population like other Muslim communities of the East.

No body wants to hear that he is psychogenic and problem is psychological. If physician tell them this way, they will run not walk to another physician to

**Table 2.** Success of phosphodiesterase inhibitor (Sildenafil)

	Frequency	95% CI*	P Value
Success of First Dose	36	(0.654, 0.904)	< 0.001
Success on Second Dose	6	(0.299, 0.925)	0.508
Failure after Second Dose and Success with Injection	3	--	--
Total	45		

\* CI, Confidence Interval, based on exact binomial distribution.

find out “what is wrong actually”.

In Pakistan like other Muslim conservative countries men, who get married for the first time, are exposed to marked stress and severe anxiety due to fear of sexual failure. There are several reasons; firstly their wives have intact hymen. Secondly society wants them to have sexual intercourse as early as possible mostly on the first or second day. Thirdly sexual education is deficient. Fourthly, marked tiredness due to hectic activity of arranging barat, traveling, Mahndi *etc.*

Reassurance and use of PDE-5 inhibitor (Sildenafil) proved in our study to be very effective in the management of honeymoon impotence like other studies in the various Muslim communities of the East (11, 12).

Sildenafil citrate a PDE type-5 inhibitor is an effective and well tolerable oral erectogenic medication. Its mechanism of action is mediated via cyclic guanosine monophosphate (cGMP), the 2<sup>nd</sup> messenger that mediates smooth muscle relaxation in response to nitric oxide release by nitrergic nerve endings and endothelial cells (13).

Age range in our study was 20-39 years with a mean of 27 ( $\pm 4$ ) years. This is comparable to another study from Jedah Saudi Arabia which reported mean age of 27 years (14). Prevalence of this problem is also reported to be similar as in other studies (14, 15).

Mean duration elapsed before seeking medical advice in our study was 10 ( $\pm 14$ ) days with a range of 1-75 days. This period is shorter than reported in another study (15).

Oral PDE-5 inhibitor (Sildenafil) was successful in 93% patients as compared to 77% reported in another study (14).

Adverse events like headache, myalgia, palpitation and backache are also comparable to other series (14, 15).

The occurrence of this problem is 2<sup>nd</sup> or 3<sup>rd</sup> marriage denote that it is not mere a matter of experience but multifactorial. Anxiety of

performance is not only met with one's first partner but also can be a random failure at any other occasions setting vicious circle of fear & failure. In our small series 2 (4.45%) men failed in their 2<sup>nd</sup> marriage.

## Conclusions

First night ED is not an uncommon condition in some special population. PDE-5 inhibitor, Sildenafil is highly effective and safe treatment for this condition, with ease of administration, rapidity of response, long duration of action, high success rate and with mild tolerable complication.

## Conflict of interest

It is stated that there was no conflict of interest.

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