Volume 11, Issue 3, March – 2026 International Journal of Innovative Science and Research Technology
ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26mar1414

Multifactorial Sexual Dysfunction in a Young Bisexual Male: A Case Report Highlighting Correlation Between Hypoactive Sexual Desire Disorder, Endocrine Axis Suppression and Minority Stress

Dr. Nandan Kishur Kar[1]*; Dr. Manash Chakraborty[2]; Dr. Srayoshi Barua[3]; Dr. Sujan Kumar Dey[4]

[1]AndroCare, Cumilla, Bangladesh

[2]University Hospital, Wales, United Kingdom

[3]Mainamoti Medical College Hospital, Cumilla, Bangladesh

[4]University Hospital, Plymouth, United Kingdom

Corresponding Author: Dr. Nandan Kishur Kar*

Publication Date: 2026/04/01

Abstract: Sexual dysfunction is a multifactorial condition that reflects underlying neuroendocrine disturbances as well as psychosocial difficulty. We are presenting a case report of a 28-year-old bisexual male with concurrent acquired Hypoactive Sexual Desire Disorder (HSDD) with Premature Ejaculation (PE) and Erectile Dysfunction (ED). Endocrine evaluation revealed Hypogonadotropic Hypogonadism, Hyperprolactinaemia, and Subclinical Hypothyroidism, indicating a significant suppression of Hypothalamic-Pituitary-Gonadal (HPG) axis, which is further, worsened by psychosocial stressors, including minority stress, self-devaluation, childhood sexual abuse, and dyadic conflict following marriage. A multidisciplinary approach including Testosterone replacement, Dopamine agonist therapy, Thyroid hormone replacement, Dopaminergic antidepressant, Behavioral therapy, and Couple therapy led to in progressive improvement with restoration of sexual function and interpersonal equilibrium. This case emphasizes the importance of integrating hormonal, psychological, and socio-cultural factors in the diagnosis and management of male sexual dysfunction, especially in sexual minority populations.

Keywords: *Hypoactive Sexual Desire Disorder, Bisexual Male, Premature Ejaculation, Erectile Dysfunction, Hypogonadotropic Hypogonadism, Hyperprolactinaemia, Behavioural Therapy, Couple Therapy*

How to Cite: Dr. Nandan Kishur Kar; Dr. Manash Chakraborty; Dr. Srayoshi Barua; Dr. Sujan Kumar Dey (2026) Multifactorial Sexual Dysfunction in a Young Bisexual Male: A Case Report Highlighting Correlation Between Hypoactive Sexual Desire Disorder, Endocrine Axis Suppression and Minority Stress. *International Journal of Innovative Science and Research Technology*, 11(3), 2847-2849. https://doi.org/10.38124/ijisrt/26mar1414

I. INTRODUCTION

Male sexual dysfunction typically comprises Hypoactive Sexual Desire Disorder (HSDD), Premature Ejaculation (PE), Erectile Dysfunction (ED) or Delayed Ejaculation[1]. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM)-V, HSDD in male is characterized by 'the persistent or recurrent deficiency (or absence) of sexual or erotic thoughts or fantasies and desire for sexual activity that persists for a minimum duration of 6 months and causes clinically significant distress in the individual'[2].

According to The ESSM Manual of Sexual Medicine (2nd edition), HSDD may be life-long where individual has had little or no desire for sexual stimulation, partnered or solitary, or acquired where individual previously had sexual interest

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26mar1414

but now lacks interest in the sexual activity, partnered or solitary, or situational where individual previously had sexual interest in the present partner but now has desire for sexual stimulation, solitary or someone other than the present partner[3]. Acquired HSDD is usually associated with low Testosterone and/or high Prolactin. Presence of organic conditions such as hypogonadism, hyperprolactinaemia, and psychopathology along with some drugs are thought to increase the prevalence of HSDD[4, 5, 6]. Moreover, a study showed significant association of PE, ED, and LUTS with HSDD[7]. Hypothyroidism, an endocrine disorder is also thought to be associated with HSDD, possibly due to low Thyroid hormone induced raised Prolactin release[8].

National Survey of Sexual Health and Behavior 2009 in the United States identified that 2.6% adult men are bisexual (MSM- Men who have Sex with Men) having a higher rate of sexual dysfunction[9]. Probability-based studies from the United States showed bisexual men are disproportionately affected by depression which consequently leads to sexual dysfunction[10]. We are presenting a case report of a 28-year-old previously bisexual male who was suffering from low sexual desire (LSD) towards his spouse along with PE and ED.

II. CASE SUMMARY

A 28-year-old male, non-smoker, non-alcoholic, married for 6 months presented with very low sexual desire toward his spouse since marriage along with inability to maintain erection sufficiently and ejaculatory latency time within 30 seconds of vaginal penetration. At presentation, his Sexual Desire Inventory-2 (SDI-2) score was 40 (out of 101) and International Index of Erectile Function (IIEF) score was 2 (out of 4) with intact morning erection. His sexual history includes bisexual experiences with three partners (2 male and 1 female) several times while he was residing abroad until 12 months before his marriage with two times childhood sexual abuse. He has had no symptoms of hypothyroidism or history of taking any recreational drugs or recent inguino-scrotal surgery but one-month course of SSRI (Sertraline) for situational depression related to his current issue.

Examination reveals normal testicular size and consistency with no penile abnormalities and normal secondary sexual characteristics.

Table 1 His Baseline Hormonal Evaluation Shows

Hormone	Test result	Reference value
Total Testosterone	0.58 ng/mL	2.4-12.0 ng/mL
Prolactin	30 ng/mL	3.45-17.42 ng/mL
Estradiol	32.25 pg/mL	< 75 pg/mL
FSH	1.0 mIU/mL	1.5-12.4 mIU/mL
LH	0.9 mIU/mL	1.4-7.7 mIU/mL
TSH	0.45 µIU/mL	0.35-5.5 µIU/mL
FT4	0.65 ng/dL	0.78-2.19 ng/dL

RBS was found 5.6 mmol/L and Semen Analysis shows normal parameters. Based on presentations, clinical findings and investigations, a diagnosis of Acquired Hypoactive Sexual Desire Disorder (HSDD) with Premature Ejaculation (PE) and Erectile Dysfunction (ED) was made the cause of which identified Hypogonadotropic Hypogonadism, Hyperprolactinaemia and Subclinical Hypothyroidism. The patient was managed by:

- Testosterone Enanthate, 250 mg, IM, every 4 weeks × 3 doses
- Cabergoline, 0.5 mg, PO, twice weekly × 4 weeks
- Bupropion SR, 150 mg, PO, once daily × 4 weeks
- Levothyroxine, 25 µg, PO, once daily × 4 weeks
- Behavioural Therapy and Couple Therapy, twice weekly × 8 weeks

➢ *On follow-up at 4th week*

- Mild improvement in sexual desire with improved sexual orientation, mood and communication reported by both partners.
- Baseline blood hormonal profile:

✓ Total Testosterone (1.10 ng/mL)
✓ Prolactin (19.30 ng/mL)
✓ FSH (1.75 mIU/mL)
✓ LH (1.52 mIU/mL)
✓ FT4 (0.75 ng/dL)

- Medications, Behavioural Therapy and Couple therapy were continued.

➢ *On follow-up at 8th week*

- Improving sexual desire as well as emotional bonding and sexual reconnection reported by both partners.
- Baseline blood hormonal profile:

✓ Testosterone (1.95 ng/mL)
✓ Prolactin (11.40 ng/mL)
✓ FT4 (1.1 ng/dL)

- 3rd dose of Testosterone Enanthate, Behavioural Therapy and Couple Therapy, twice weekly were continued.

➢ *On follow-up at 12th week*

- Sexual desire fully restored with improved IIEF from 2 to 3, sufficient erection as well as normalized ejaculatory latency time and improved sexual satisfaction and relational harmony reported by both the patient and his spouse.
- Baseline blood hormonal profile:

✓ Testosterone (2.58 ng/mL)
✓ Prolactin (8.40 ng/mL)
✓ FT4 (1.45 ng/dL)

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26mar1414

III. DISCUSSION

This case report illustrates a complex presentation of sexual dysfunction in a 28-year-old bisexual male, where HSDD, ED and PE occurred concurrently, most probably due to minority stress, internalized stigma, and prejudice against sexual orientation in the context of Hypogonadotropic Hypogonadism, Hyperprolactinaemia, and Subclinical Hypothyroidism likely contributing to profound suppression of the Hypothalamic-Pituitary-Gonadal (HPG) axis, as evidenced by low LH, FSH, and Testosterone, with contributing factors including elevated Prolactin and low free Thyroxine, while psycho-social factors including history of childhood sexual abuse, prior bisexual behaviour with dyadic conflict post-marriage exacerbated the sexual dysfunction[11].

A study from Cleveland Clinic showed that MRI imaging is more crucial when Prolactin levels become > 100 ng/mL in the context of Pituitary Macroadenomas[12]. So, CT or MRI was not performed in this case.

A targeted approach combining Hormonal therapy including Testosterone Enanthate, Cabergoline, and Levothyroxine, Dopaminergic antidepressant (Bupropion), Behavioural Therapy, and structured Couple therapy led to progressive biochemical normalization as well as restoration of sexual function, emotional intimacy, and interpersonal equanimity.

IV. CONCLUSION

This case report highlights an intricate interaction of neuro-endocrine dysfunction and psycho-social stressors in HSDD, particularly in a young bisexual male. The presence of hormonal imbalances reflects a profound interference of the HPG axis which is further intensified by minority stress, childhood sexual trauma, and interpersonal disharmony, shown to affect bisexual men disproportionately and strongly associated with depressive symptoms and sexual dysfunction. The co-occurrence of HSDD, ED, and PE in this context highlights the clusters of male sexual disorders, especially when influenced by intersectional psycho-social affliction. The patient's clinical improvement following a multidisciplinary, individualized strategy demonstrates the critical need for holistic approaches. This case also reinforces the importance of considering both biological and socio-cultural determinants in the management of sexual dysfunction.

DECLARATION

I, Dr Nandan Kishur Kar, as a principal author hereby humbly declare that I have had carried out this research work along with other three co-authors entitled, "Multifactorial sexual dysfunction in a young bisexual male: A case report highlighting correlation between hypoactive sexual desire disorder, endocrine axis suppression and minority stress" No part of this research work has been submitted in any journal, either national or international prior to this date.

REFERENCES

[1]. Irfan M, Hussain NH, Noor NM, Mohamed M, Sidi H, Ismail SB. Epidemiology of male sexual dysfunction in Asian and European regions: a systematic review. Am J Mens Health. 2020;14(4):1–40. doi:10.1177/1557988320937200
[2]. Koops TU, Klein V, Bei der Kellen R, Hoyer J, Löwe B, Briken P. Association of sexual dysfunction according to DSM-5 diagnostic criteria with avoidance of and discomfort during sex in a population-based sample. Sex Med. 2023;11(3):1–7. doi:10.1093/sexmed/qfad037
[3]. Reisman Y, Porst H, Lowenstein L, Tripodi F, Kirana PS. The ESSM manual of sexual medicine. 2nd ed. European Society for Sexual Medicine; 2015
[4]. Gupta S, Kumar A, Pakhre A. Male sexual dysfunction and comorbidity. Indian J Health Sexual Cult. 2022;8(1):12–30. doi:10.5281/zenodo.6806176
[5]. Nimbi FM, Tripodi F, Rossi R, Navarro-Cremades F, Simonelli C. Male sexual desire: an overview of biological, psychological, sexual, relational, and cultural factors influencing desire. Sex Med Rev. 2020;8(1):59–91. doi:10.1016/j.sxmr.2018.12.002
[6]. Raghuraman R, Bhuyan AK, Baro A, Saikia UK. Male sexual dysfunction and hypogonadism in young adults with type 2 diabetes mellitus: a cross-sectional study. J Hum Reprod Sci. 2024;17(3):170–177. doi:10.4103/jhrs.jhrs_60_24
[7]. Meissner VH, Schroeter L, Köhn FM, Kron M, Zitzmann M, Arsov C, et al. Factors associated with low sexual desire in 45-year-old men: findings from the German Male Sex-Study. J Sex Med. 2019;16(7):981–991. doi:10.1016/j.jsxm.2019.04.018
[8]. Shen M, Li X, Wu W, Dou R, Mei X, Xu W, et al. Is there an association between hypothyroidism and sexual dysfunction: a systematic review and cumulative analysis. Sex Med. 2021;9(3):100345. doi:10.1016/j.esxm.2021.100345
[9]. Cheng PJ. Sexual dysfunction in men who have sex with men. Sex Med Rev. 2022;10(1):130–141. doi:10.1016/j.sxmr.2021.01.002
[10]. Feinstein BA, Ford JV, Lattanner MR, Bo N, Tu W, Dodge B. The role of partner gender in bisexual men's stigma-related experiences and mental health: results from a probability-based sample in the United States. Stigma Health. 2023;8(2):179–186. doi:10.1037/sah0000297
[11]. Nimbi FM, Ciocca G, Limoncin E, Fontanesi L, Uysal ÜB, Flinchum M, et al. Sexual desire and fantasies in the LGBT+ community: a focus on bisexuals, transgender, and other shades of the rainbow. Curr Sex Health Rep. 2020;12(3):162–169. doi:10.1007/s11930-020-00262-8
[12]. Serhal D, Weil RJ, Hamrahian AH. Evaluation and management of pituitary incidentalomas. Cleve Clin J Med. 2025;92(7):793–801