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Research Article

To Determine the Quality of Life and Sexuality in Female with Lichen Sclerosus

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ABSTRACT

Aim: To determine the quality of life and sexuality in female with lichen sclerosus.

Methods and Materials: This research comprised patients with newly diagnosed, biopsy-proven VLS (VLS group) and those who attended for a regular gynaecological check-up and did not take any estrogen-containing drugs (control group). A total of 100 patients were split into two groups of similar size. After receiving informed permission, one of the researchers conducted face-to-face interviews with the individuals. During these interviews, patients completed validated indian versions of the DLQI and FSFI questionnaires to measure their quality of life and sexual function, respectively.

Results: The patients in the VLS and control groups were 53.58±8.59 and 51.96±6.78 years old, respectively. The difference was significant for overall scores (P<0.001) and scores on symptomatology, embarrassment, and self-consciousness (P<0.001), social or leisure activities (P=0.41), interpersonal connections (P=0.002), and working or studying performance (P<0.001). Sexual desire (P<0.001), sexual arousal (P<0.001), orgasm (P<0.001), pleasure (P<0.001), and pain (P<0.001) were substantially different between the two groups, although lubrication (P=0.22) was identical. Except for lubrication, all subgroups had greater mean FSFI ratings than the control group.

Conclusion: we infer that VLS is linked to female sexual dysfunction. Because patients may be reticent to express their sexual issues verbally, doctors caring for these patients should have a low barrier for using pertinent surveys during clinical visits with these patients.

Keywords: Quality Of Life, Sexuality, Female, Lichen Sclerosus.

INTRODUCTION

Lichen sclerosus (LS) is a chronic inflammatory skin illness that mostly affects the anogenital area in women of all ages, but is most common in prepubertal girls and perimenopausal and postmenopausal women. A positive family history has been observed in up to 12%-17% of instances of LS in women. [1,2] Although ultrapotent topical steroids are advised as a first-line therapy and dard protocol, there is no clear cure for LS. [2–4] Lichen sclerosus is connected with a 5% lifetime risk of vulvar squamous cell cancer. [5,6]

Lichen sclerosus produces significant pain (e.g., itching and soreness) as well as architectural alterations (eg, scarring, phimosis, whitening, and narrowing of the vaginal introitus).[1,2,7] Women with LS often suffer discomfort, and in severe instances, the introitus may become narrow, resulting in painful sexual intercourse or preventing sexual penetration entirely. [8,9]

Lichen sclerosus causes considerable impairment in many facets of a woman's life. Lichen sclerosus has a detrimental influence on overall quality of life (QoL), notably in the areas of sexuality, interpersonal relationships, and mental health. [1,5,8,10]

Because of the architectural changes in the vulva, some women feel humiliated, embarrassed, and perhaps uncomfortable and anxious about being intimate with a sexual partner.[6,7] Women with LS who seek treatment show significant QoL impairment and report sexual issues as well as an effect on their overall enjoyment. These women also report avoiding

and withdrawing from sexual interaction. [1,2,8,11,12]

Because of the manifestations of emotional, mental, and physical suffering, the physical symptoms associated with genital LS and LP reduce quality of life (QoL). Various validated instruments may be used to assess QoL; noteworthy dermatology-specific tools are the Dermatology Life Quality Index (DLQI) and the Skindex-29.[13,14] A number of studies have shown that the QoL and sexuality of women with LS are impaired, and that they should have had sexological therapy in accordance with the European guideline for the treatment of vulvar disorders.[5,8,1]

METHODS AND MATERIALS

This prospective observational research was undertaken on patients with newly diagnosed, biopsy-proven VLS (VLS group) and those who attended for a regular gynaecological check-up and did not take any estrogen-containing drugs (control group). A total of 100 patients were split into two groups of similar size. Exclusion criteria included being under the age of 18, having mental illnesses, and refusing to participate. After receiving informed permission, one of the researchers conducted face-to-face interviews with the individuals. During these interviews, patients completed validated indian versions of the DLQI and FSFI questionnaires to measure their quality of life and sexual function, respectively. Participants' demographic characteristics, such as age, BMI, menopausal status, and co morbidities, were recorded.

Statistical Investigation

The numerical variables were statistically analysed using the SPSS (Statistical Package for the Social Sciences) 25.0 software (IBM Corporation, Armonk, New York, US). For demographic characteristics, frequencies and percentages were computed. Cronbach's alpha was employed in the dataset's reliability study. Whitney Mann the U test was developed to compare two independent groups. P-values less than 0.05 were deemed statistically significant.

RESULTS

Table 1 shows the demographic characteristics of the research participants. The patients in the VLS and control groups were 53.58±8.59 and 51.96±6.78 years old, respectively. In terms of patient age, BMI, menopausal state, and co morbidity, the two groups were identical.

The VLS group scored better on quality of life than the control group (Table 2). The difference was significant for overall scores (P<0.001) and scores on symptomatology, embarrassment, and self-consciousness (P<0.001), social or leisure activities (P=0.41), interpersonal connections (P=0.002), and working or studying performance (P<0.001).

Table 1: Demographic Data of the Study Participants

	Vls=50	**Control=50**	**P-Value**
Age in years			
below 35	6(12%)	5(10%)	
35-45	10(20%)	7(14%)	
45-55	27(54%)	35(70%)	
55-65	4(8%)	2(4%)	
above 65	3(6%)	1(2%)	
Mean age	53.58±8.59	51.96±6.78	0.43
BMI	25.85±3.69	24.58±3.57	0.33
Postmenopausal	20(40%)	21(42%)	0.52
Co morbidity	22(44%)	15(30%)	0.29

Table 2: Comparison of the VLS and Control Groups in Terms of DLQI

	VLS =50	**Control =50**	**P-Value**
	Mean (SD)	Mean (SD)	
Total DLQI Score	6.78±1.69	2.05±0.66	<0.001
Symptoms and Feelings	2.17±0.47	0.52±0.11	<0.001
Daily Activities	1.22±0.28	0.47±0.14	0.03
Leisure	0.96±0.21	0.42±0.12	0.41
Personal Relationships	1.42±0.32	0.33±0.10	0.002
Work or School	0.66±0.22	0.17±0.11	0.005
Treatment	0.31±0.07	0.27±0.09	0.52

*Mann Whitney-U Test

Sexual desire (P<0.001), sexual arousal (P<0.001), orgasm (P<0.001), pleasure (P<0.001), and pain (P<0.001) were substantially different between the two groups (Table 3), although lubrication (P=0.22) was identical. Except for lubrication, all subgroups had greater mean FSFI ratings than the control group.

Table 3: Comparison of the VLS and Control Groups in Terms of FSFI

	VLS= 50	**Control =50**	**P-Value**
	Mean (SD)	Mean (SD)	
Total FSFI Score	16.55±3.69	26.85±4.52	<0.001
Desire	2.88±1.18	4.89±1.47	<0.001
Arousal	2.52±1.63	4.69±1.37	<0.001
Lubrication	3.02±1.74	4.22±1.63	0.22
Orgasm	2.69±1.22	4.55±1.36	<0.001
Satisfaction	2.96±1.63	4.63±1.84	<0.001
Pain	2.82±1.24	3.93±1.54	<0.001

*Mann Whitney-U Test

DISCUSSION

Because of its anatomical placement, self-inspection of the vulva is difficult. Most vulvar skin lesions go unnoticed because the underlying skin is folded. Aside from specialised vulvar dermatoses, numerous systemic dermatoses may also affect the vulva. [15] As a result, diagnosing vulvar illnesses may be difficult and need a multidisciplinary approach.

Lichen sclerosus (LS) is an uncommon, chronic inflammatory disease affecting mostly the anogenital area.[16] It has a bimodal age distribution, with prepubertal and postmenopausal peaks in occurrence. Despite the fact that numerous environmental and genetic variables have been implicated, it is thought that autoimmunity and chronic inflammation play important roles in its aetiology. [17-19] Karadag et al.[20] studied 350 LS patients, 98% of whom had vulvar involvement, and found that 22% exhibited autoimmune antibodies (anti-thyroid, anti-nuclear, anti-mitochondrial antibodies).

Pruritus, burning feeling, discomfort, and dyspareunia are the most common symptoms of VLS patients. However, if both the urine and gastrointestinal systems are implicated, dysuria, constipation, and other gastrointestinal symptoms may occur. [21]

Dyspareunia and other sexual issues in VLS patients might be caused by one of three factors.

[22] VLS causes the skin to thin and become more sensitive, which might result in tears and dyspareunia. Furthermore, worry and fear of pain cause dyspareunia by lowering arousal and contraction of the pelvic muscles during sexual intercourse. Dyspareunia, orgasmic dysfunction, and other sexual issues may be exacerbated by anatomical malformations such as clitoral effacement, labial fusion, and introital stenosis.

According to our findings, VLS has a considerable influence on patients' quality of life and sexual function. When compared to the control group, the mean DLQI score in the VLS group was considerably higher.

44% (n=22) of VLS patients had a worse quality of life (DQLI 6). Because DLQI ratings also reflect disease-related anxiety, the decrease in life quality of these individuals may be attributable, at least in part, to their worry. [23] Several dermatoses have the potential to impair quality of life. [24-26] Kiebert et al.[27] discovered that the mean DLQI in female atopic dermatitis patients was 6.6. In a Spanish research, the mean DLQI score of psoriasis patients was 5.3. Our VLS patients' mean DLQI was comparable to the mean scores of individuals with atopic dermatitis, hyperhidrosis, psoriasis, and dermatomyositis. [24]

Basak et al.[28] studied the quality of life of individuals with common dermatologic illnesses and found that the first and second items of the DLQI were greatest in papulosquamous skin disorders (psoriasis and lichen planus). These questions examine the patients' symptomatology, embarrassment, and self-consciousness. Our investigation confirmed this conclusion, revealing that the greatest scores were achieved in questions 1 and 2. The existence of subjective symptoms such as pruritus, pain, and burning feeling indicates that DLQI is influenced by factors other than disease-related anxiety. The authors of the research published by Cheng et al. discovered that mean DLQI was lower in patients with

vulvar dermatitis and vulvar erosive lichen planus, and they attributed this result to greater treatment response and reduced discomfort in these individuals. [26]

Hedwig et al. investigated the effect of VLS on sexual function and found that the FSFI scores of VLS and control patients were 15.42 and 24.22, respectively[29], which is consistent with our results. When compared to the control group, Dalziel et al. found that dyspareunia was much more common and the frequency of sexual intercourse was significantly lower in VLS patients. [30] These results are consistent with ours: In terms of arousal and pain levels, we discovered a substantial difference between the VLS and control groups. According to Haefner et al., dyspareunia reduced both the frequency and pleasure of sexual intercourse in VLS patients. [31]

Several trials found that topical pain relievers were effective in women with VLS.

[30,31]; nevertheless, these therapies did not always result in improved sexual function. Two trials found that topical immunomodulators might give clinical relief and histological improvement in VLS patients; nevertheless, despite these favourable improvements, sexual dysfunction could be permanent. It's also uncertain if increasing knowledge of the risk of sexual dysfunction leads to better patient care and a higher quality of life. [32] Despite the fact that lowered arousal and pain are known to impair lubrication, our research found that VLS and control group patients had equal lubrication ratings. [30] We relate this result to patients' reluctance to discuss about this condition. Furthermore, the VLS stage may be related to the degree of sexual dysfunction.[33] There may be no substantial impairment in lubrication function in people who undergo VLS at an earlier stage without scar development and accompanying problems such as introital stenosis.

Treatment of VLS is critical, not only because of the effect on patients' quality of life and sexual function, but also because of the long-term risk of squamous cell carcinoma. The first-line therapy for VLS is topical and intradermal (intralesional) corticosteroids.[17] The danger of localised atrophy and systemic deleterious effects should be considered. [32]

Second-line therapy includes topical calcineurin inhibitors such as tacrolimus and pimecrolimus. The fundamental benefit of these medicines over corticosteroids is that they do not cause regional atrophy over time. Oral acitretin, cyclosporin, methotrexate, topical progesterone, testosterone, ultraviolet A1 phototherapy, and photodynamic therapy are further therapeutic possibilities. [18] However, surgical therapy is recommended in complicated VLS with structural abnormalities, significant adhesions, and scar formation. Vulvoperineoplasty may address Fourchette, introital stenosis, posterior fissure, and scarring.[34,35]

Limitations

One of our study's weaknesses is the lack of data on VLS phases. According to certain research, senior age, postmenopausal status, poor educational standing, singleness, physical and psychological health concerns, and bad sexual experiences are all predictors of sexual dysfunction. Sexual pleasure and menopausal status have a substantial association. Postmenopausal individuals may have vaginal atrophy, dryness, urine incontinence, and infections, which may lead to a decrease in sexual activity. The existence of a 'physical' illness in their genitalia may have had a psychological impact on our VLS patients, leading to a decline in sexual desire. In this research, however, we did not examine the psychological effect of VLS. Furthermore, there was little information on the usage of lubricants, the function of sex therapy, or other therapies.

CONCLUSION

Despite the limitations, we infer that VLS is linked to female sexual dysfunction. Because patients may be reticent to express their sexual issues verbally, doctors caring for these patients should have a low barrier for using pertinent surveys during clinical visits with these patients.

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