
Sexual Dysfunction in Ovarian Cancer Survivors: Sexual Rehabilitation Therapies

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The gynecological cancer survivors often experience sexual dysfunction due to the cancer itself and the treatment. The cancer affects them both physically and psychologically. They suffer from a wide range of sexual side effects like decreased arousal, dryness of vagina, decreased sexual desire and pleasure [1]. Presently, approximately half of the ovarian cancer survivors live for many years after the diagnosis due to the advances in surgery and chemotherapy. However, the treatment of ovarian cancer is demanding, and it includes multiple surgeries and chemotherapy courses. These treatment modalities affect the sexual functioning of ovarian cancer survivors negatively and compromises their Quality of Life [2,3]. The sexual dysfunction experienced by ovarian cancer survivors should be addressed and managed by the treating clinicians. However, there is a lot of gap in this area and patients are not being provided the desired attention by the health care providers regarding their sexual rehabilitation [4]. Sexual dysfunction in ovarian cancer survivors is multifactorial, so single treatment approach is not enough to provide complete sexual rehabilitation to ovarian cancer patients. Often, combination of therapies is given to them. We will be discussing the therapies to improve sexual functioning in ovarian cancer survivors in brief.

Bober et al demonstrated significant effects on sexual rehabilitation in 46 ovarian cancer survivors via half day intervention including psychoeducational sessions, take home educational materials and 1 telephone booster call 4 weeks post intervention. The subjects showed improved sexual functions which was maintained till 6 month follow up [1]. The psychoeducational interventions and cognitive behavior therapy must be included as a part of intervention to treat sexual dysfunction.

The low dose vaginal estrogen also appears to improve vaginal atrophy and dryness by increasing blood circulation, thus leads to better sexual functions in ovarian cancer survivors [5]. ACOG endorses non hormonal vaginal lubricants and moisturizers as a first line therapy and reserves hormonal preparations after consultation with oncologist for women with hormone dependent cancers [6]. The women with ovarian cancer can be prescribed vaginal oestrogen safely for genitourinary syndrome with the rate of recurrences and other adverse outcomes being uncommon [7]. The evidence suggests regarding safety of vaginal estrogen in ovarian cancer survivors. So, we could offer vaginal estrogens in ovarian cancer survivors experiencing sexual dysfunction.

In a RCT by Guidozi et al where 130 ovarian cancer survivors were randomized to receive continuous oral conjugated equine estrogen or placebo, it was reported that there were no significant differences in terms of disease-free survival and overall survival in both the groups [8]. A study reported that the use of hormone before diagnosis in patients with epithelial ovarian cancer therapy does not affect survival with slightly improved survival in patients diagnosed with serous ovarian carcinoma. The women using hormone therapy after the diagnosis demonstrated improved survival in this study. However, that could be attributed to administration of HRT in selected survivors [9]. Thus, the hormone replacement therapy could also be tried in ovarian cancer survivors after ruling out contraindications.

There are some other therapies as well which have been tried in ovarian/gynecological cancer survivors. Flibanserin is a postsynaptic 5-HT_{1A} agonist and 5-HT_{2A} antagonist. Portman et al administered flibanserin 100 mg/day in menopausal women in PLUMERIA trial where they concluded that flibanserin could be efficacious in postmenopausal women with HSDD [10]. Ospemifene is a non-hormonal systemic treatment for approved for dyspareunia and vulvaovaginal dryness by the FDA and European Medicines Agency in 2019. A study reported that the once-daily oral ospemifene 60 mg was effective for the treatment of VVA in postmenopausal women with vaginal dryness [11]. Barton et al stated that testosterone supplementation has been studied for libido-enhancing effects in women but not in female cancer survivors. It has not been approved by the Food and Drug Administration. Hence it cannot be recommended for use [12]. The patients having severe penetrative dyspareunia can be relieved by applying 4% aqueous lidocaine to the vulvar vestibule for 3 min before intercourse. The application of lidocaine compresses to the vulvar vestibule enhanced the sexual experience significantly when compared with the normal saline [13]. Bupropion has been found useful in SSRIs induced persistent sexual dysfunction. Bupropion lacks serotonergic activity. It has noradrenergic and dopaminergic actions resulting in lower incidence of sexual dysfunction [14]. The RCT done by Nurnberg et al to investigate the efficacy of sildenafil in doses of 50 mg -100 mg in selective and nonselective serotonin reuptake inhibitor induced sexual dysfunction in women found that, the sildenafil reduces adverse sexual effects significantly in women taking selective and nonselective serotonin reuptake inhibitors [15]. The use of vaginal dilators has been found to improve vaginal thinning, maintain vaginal patency and enhance quality of life in gynaecological cancer survivors [16]. Pelvic floor physical therapy includes massages, pelvic floor strengthening exercises, pelvic floor relaxation exercises, intravaginal physiotherapeutic exercises etc. These exercises increase flexibility, improves tissue blood circulation and tensile strength in paravaginal tissues. They also strengthen pelvic floor muscles along with increasing blood flow. Goldfinger et al provided preliminary support for the effectiveness of Pelvic Floor Physical Therapy in treating the pain of provoked vestibulodynia, as well as some of the sexual and cognitive correlates of provoked vestibulodynia [17]. The use of some herbal preparations like black cohosh extract, ashwagandha root extract etc. have also been tried to alleviate sexual dysfunction. However, there is not much literature on their use, and they are not approved by FDA [18,19].

So, the ovarian cancer survivors suffer from sexual dysfunction and this issue is not addressed by their care providers adequately. It is the duty of health care provider to ensure their sexual rehabilitation by asking their sexual well-being. The sexual rehabilitation of ovarian cancer survivors should be multimodal addressing both physical and psychological issues. The health care provider must offer the whole basket of therapies for sexual dysfunction available to the women. Both health care provider and women should choose one or more therapies after weighing risks and benefits.

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