Selección de Resúmenes de Menopausia

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The Effect of Gradual Ovarian Failure on Dynamic Muscle Function and the Role of High Intensity Interval Training on Mitigating Impairments

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Skeletal muscle contractile function is impaired in menopause and exercise may mitigate this decline. We used the VCD model of menopause to investigate the effects of gradual ovarian failure on skeletal muscle contractile function and whether high intensity interval training (HIIT) can mitigate impairments. Sexually mature female CD-1 mice were assigned to one of three groups: control sedentary (n=5), VCD-sedentary (n=5), or VCD-training (n=5). Following ovarian failure (a 4-month process), the VCD-training group underwent 8-weeks of uphill HIIT. Mice were sacrificed 8-weeks after ovarian failure, representing late menopause. Single fibres from the soleus (SOL) and extensor digitorum longus (EDL) muscles were dissected, chemically permeabilized, and mechanically tested. Single muscle fibres were maximally activated (pCa4.5) then isotonic load clamps were performed to evaluate force-velocity-power relationships. Absolute force and peak power were 31% and 32% lower in VCD-sedentary fibres compared to control fibres, respectively, in both SOL and EDL muscles. Despite reductions in absolute force, there were no concomitant increases in contractile velocity to preserve power production. HIIT attenuated force loss in the VCD-training group such that peak force was not different from the control group across muscles and was partially effective at mitigating power loss (22% higher peak power in VCD-training compared to VCD-sedentary), but only in fast-type SOL fibres. These findings indicate that ovarian failure impairs dynamic contractile function - likely through a combination of lower force-generating capacity and slower shortening velocity, and that HIIT may be insufficient to completely counteract the deleterious effects of menopause at the cellular level.

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Non-oestrogen-based and complementary therapies for menopause

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Women are living a significant portion of their adult lives in the post-reproductive phase, and many seek help for debilitating menopausal symptoms. Every individual's experience of menopausal transition is unique. Adopting a holistic approach to managing the menopause using a combination of lifestyle, hormonal, and non-hormonal interventions is key to maximise the quality of life of affected women. However, many opt to use non hormonal options or have contraindications to using hormonal therapy. Studies have shown that several pharmacological non-hormonal medications such as SSRIs, SSRI/SNRIs, Gabapentin, and Pregabalin are effective for managing vasomotor symptoms as well as other menopausal symptoms. Their main side effects are dry mouth, nausea, constipation, reduced libido, and loss of appetite. Clonidine is the only non-hormonal drug which is licenced for control of vasomotor symptoms in the UK, but has several side effects including dizziness and sleep disturbance. Cognitive Behavioural Therapy is recommended as a treatment for anxiety, sleep problems and vasomotor symptoms related to menopausal transition. Evidence for clinical efficacy and safety of herbal remedies and alternative therapies remains weak. Studies with neurokinin receptor 3 antagonists on women with hot flushes have shown improvement in vasomotor symptoms and results of large-scale studies are awaited.

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Effect of Lifestyle Modification Intervention Programme on Bone Mineral Density among Postmenopausal Women with Osteoporosis

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Objectives: Osteoporosis is one of the major public health problems worldwide among postmenopausal osteoporotic women. Lifestyle modification interventions along with pharmacotherapy help to revert bone loss and prevent complications. Methods: A randomised controlled trial was conducted at Kasturba Hospital, Manipal from January 2019 to December 2021 among postmenopausal women with osteoporosis. The postmenopausal women who attended

the osteoporosis clinic and were within the age group of 45-65 years, could speak and understand English or Kannada and whose bone mineral density (BMD) score was between -1 and -3 were included in the study. The total sample size of the study was 120 with 60 in each of the experimental and control groups. After obtaining informed consent, a stratified block randomisation method was used to allocate the participants to intervention and control groups. The BMD was monitored by the portable ultrasound densitometer by a technician at the outpatient departments. The baseline information was collected by a structured demographic questionnaire. Intervention group participants received a lifestyle modification intervention program (LMIP) whereas the control group received standard regular care from the physician. Follow-up was done at three and six months. Results: The results revealed that the increase in the BMD median score among the experimental group was from -2.2 (-2.5- -1.8) to -1.5 (-1.8- -0.65) whereas in the control group, it was from -2.3 (-2.6- -1.9) to -2.0 (-2.4- -1.5). The results of the Mann Whitey U test showed a statistical significance between the intervention and control groups in the post-test after six months ($U = 505.5$; $P < 0.05$). Wilcoxon signed rank test showed a significant change in both the intervention and control groups from pre-test to post-test I (3 months) and post-test II (6 months; $P < 0.001$).Co nclusion: The lifestyle modification intervention was found to be effective in improving the bone health status of postmenopausal women. Hence it is very important to integrate it into regular therapy.

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Long-term clinical and histological safety and efficacy of the CO2 laser for treatment of genitourinary syndrome of menopause: an original study

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Objective: This study aimed to evaluate histological modifications of the vaginal mucosa after repeated microablative fractional CO2 laser treatments. As secondary objectives we evaluated the clinical effects associated with repeated microablative fractional CO2 laser treatments using validated questionnaires. Methods: A prospective intervention study was performed in the Division of Gynecology and Obstetrics, Urogynecology Unit, IRCCS San Raffaele Scientific Institute with 15 postmenopausal women complaining of genitourinary syndrome of menopause symptoms. The cohort of patients was submitted to at least two previous laser treatment cycles in the past years. The Vaginal Health Index (VHI), visual analog scale (VAS), Female Sexual Function Index (FSFI), Urinary Distress Inventory-6 (UDI-6), International Consultation on Incontinence Questionnaire - Urinary Incontinence (ICIQ-UI) and 5-point Likert scale were used. Moreover, histological examinations were carried out on all samples. Results: At 4 weeks after the last treatment, the VHI score and all FSFI items were significantly increased compared with baseline. We observed a statistically significant decrease in both frequency and severity for all urinary symptoms after the follow-up. We observed a statistically significant increase in the number of epithelial cell layers with a consequent increase in epithelial thickness, in the number of glycogen-filled cells and in the number of papillae after the laser treatment. No signs of fibrosis were observed as neovascularization was observed in each woman. Conclusions: This is the first study demonstrating the histological persistency of efficacy in repeated annually laser treatment cycles, with tissue changes always leading to regenerative results without any sign of fibrosis.

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Evaluation and Comparison of Citalopram and Venlafaxine for Management of Hot Flashes in Women with Breast Cancer

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Background: Breast cancer is the most common cancer in women worldwide. Premature menopause and hot flashes are the main complications of breast cancer treatments. About 40 to 50 percent of breast cancer women who undergo chemotherapy are experiencing premature menopause symptoms, including hot flashes. Some endocrine therapies such as tamoxifen and aromatase inhibitors are associated with induction or aggravating hot flashes. Hot flashes are often debilitating and significantly impair daily functions. Therefore many therapeutic options have been studied so far for the management of this adverse effect. However, there are still some clinical challenges in managing hot flashes in patients with breast cancer. Objective: We aimed to evaluate and compare the efficacy of venlafaxine and citalopram on hot flashes in breast cancer women receiving tamoxifen. Design: We conducted a double-blind, placebo-controlled trial in forty-one, 35 to 65 years old female patients. The study lasted for four weeks, and the follow-up was for two months. Venlafaxine and citalopram treatments started with doses of 37.5 mg or 10 mg, respectively. Venlafaxine and citalopram dosages were increased in the second week to 75 and 20 mg, respectively. The study was conducted during

the year 2017.Key results: The results indicated that the total efficacy was significantly different in groups receiving citalopram, venlafaxine, and placebo. Total efficacy in the placebo group, venlafaxine, and citalopram was 14.3, 53.8, and 64.3% , respectively (p=0.02). During the second week, the efficacy in groups receiving citalopram, venlafaxine, and placebo was 57.1, 53.8, and 14.3%, respectively (p=0.04). Generally, both citalopram and venlafaxine were well tolerated. The associated adverse effects were mild to moderate in both groups. Conclusions: Although citalopram was associated with more adverse effects, including constipation, it was more effective in reducing the frequency of hot flashes when compared to venlafaxine or placebo.

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The effects of music therapy on the psychological status of women with perimenopause syndrome

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Objective: Women experience many physical and psychological changes with the reduction of progesterone and estrogen as ovarian function gradually weakens. This study applied a music psychotherapy program as a nonpharmacological treatment method in addition to treatment using drugs such as hormone therapy for perimenopausal women. Method: This study's pre-post, control-experimental research compared 20 women in the music psychotherapy experimental group and 20 in the cognitive behavioral therapy (CBT) control group. The perimenopausal women aged between 40 and 60 years experienced no menstrual period for 1 year. We provided eight sessions of music psychotherapy, including CBT, each lasting 60 minutes. The study period was 4 months from the time of recruitment. Results: The music therapy group showed a more significant decrease in the Menopause Rating Scale total (change over time, 9.2 points and 3.5 points, respectively; P = 0.008) and psychology subcategory (change over time, 6.5 points and 0.9 points, respectively; P = 0.004) of Menopause Rating Scale scores, compared with the CBT group. In addition, the music therapy group increased their quality of life psychological score, but the CBT group did not. Conclusions: These results suggest that music therapy can help the psychological and emotional symptoms of perimenopausal women and is effective for treatment. The study result provides a therapeutic basis for developing treatments for nonpharmacological mediation.