Selección de Resúmenes de Menopausia

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The impact of a specialist-led digital health application on menopause symptoms in the workplace: A single-arm, longitudinal evaluation

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Objectives: The aim of the study was to evaluate the change in menopause symptoms and work impairment among a cohort of UK working women who utilised an employer-provided digital menopause health application offering education and personalised support. Study design: We adopted a retrospective, single-arm, longitudinal approach by analysing data from 11,870 users of the Peppy Health menopause application. Users reported their menopause symptoms and work impairment on day 0 and after 90 and 180 days of application use. Main outcome measures: Menopause symptoms were measured by the Menopause Rating Scale, while work impairment was measured by a single question. Results: A significant decrease in the severity of menopause symptoms was observed in users across menopause stages, except for premenopausal users who saw lower severity and no change over time. Improvement in menopause symptoms was positively associated with the degree of application engagement. Work impairment also significantly reduced over time for menopausal users, and a significant association was observed between a reduction in menopause symptoms and a decline in work impairment. Conclusions: Our findings show that engaging with a digital menopause application is associated with an improvement in menopause symptoms, which lends initial support for the use of personalised digital solutions to help working women through the menopause transition.

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Investigation of the Causal Relationship Between Autoimmune Diseases and Premature Ovarian Insufficiency

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POI is a multifactorial disease due to lack of estrogen resulting in symptoms such as insomnia, osteoporosis, and voiding disorders. For most women, fertility is affected. Autoimmune diseases are chronic diseases caused by disorders of immune regulation that often harm the ovaries. Recent epidemiological studies have reported a correlation between autoimmune diseases (AIDs) and premature ovarian insufficiency (POI). This study aims to explore the causal relationship between AIDs and POI using bidirectional two-sample Mendelian randomization (MR). The data regarded AIDs from the Genome-wide association studies (GWAS) Catalog and the IEU Open GWAS project. POI was obtained from the FinnGen Study. All data were extracted from European populations. We used bidirectional MR with inverse variance weighting (IVW) as the primary study method, supplemented by weighted median and MR Egger validation analyses. Our original data has been uploaded to Figshare, number and distribution of the DOI (DOI: 10.6084 / m9 Figshare. 25,525,585). Figshare is an open-access data storage and sharing platform designed to make it easy for researchers to store, manage, and share their research data, code, and other academic achievements. Our study showed that the liability to Systemic lupus erythematosus (SLE) and Myasthenia gravis (MG) affect POI risk. The reverse MR analysis supported the effect of POI on Crohn's disease (CD). The result of the IVW method was supported by the sensitivity MR analysis. The IVW results showed that the odds ratio (OR) value of SLE was 1.13 and MG was 0.83. In the reverse MR, the OR value of CD was 1.22. We used MR methods to look into the causal association between 13 different kinds of AIDs and POI. Our study took a novel approach to traditional observational studies by adhering to the MR principle, which states that gamete formation depends on random assortment independent of external variables and that genetic variations precede outcomes, reducing the risk of reverse causality. The study found a correlation between SLE, MG, CD, and POI. Patients with SLE should have their ovarian function checked regularly, while those with POI should be aware of the possibility of CD and pay attention to their CD screening. MG, as a protective factor, can reduce the risk of POI.

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Loss of endogenous estrogen alters mitochondrial metabolism and muscle clock-related protein Rbm20 in female mdx mice

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Female carriers of a Duchenne muscular dystrophy (DMD) gene mutation manifest exercise intolerance and metabolic anomalies that may be exacerbated following menopause due to the loss of estrogen, a known regulator of skeletal muscle function and metabolism. Here, we studied the impact of estrogen depletion (via ovariectomy) on exercise tolerance and muscle mitochondrial metabolism in female mdx mice and the potential of estrogen replacement therapy (using estradiol) to protect against functional and metabolic perturbations. We also investigated the effect of estrogen depletion, and replacement, on the skeletal muscle proteome through an untargeted proteomic approach with TMT-labelling. Our study confirms that loss of estrogen in female mdx mice reduces exercise capacity, tricarboxylic acid cycle intermediates, and citrate synthase activity but that these deficits are offset through estrogen replacement therapy. Furthermore, ovariectomy downregulated protein expression of RNA-binding motif factor 20 (Rbm20), a critical regulator of sarcomeric and muscle homeostasis gene splicing, which impacted pathways involving ribosomal and mitochondrial translation. Estrogen replacement modulated Rbm20 protein expression and promoted metabolic processes and the upregulation of proteins involved in mitochondrial dynamics and metabolism. Our data suggest that estrogen mitigates dystrophinopathic features in female mdx mice and that estrogen replacement may be a potential therapy for post-menopausal DMD carriers.

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Menopausal hormone therapy decreases the likelihood of diabetes development in peri-menopausal individuals with prediabetes

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Background: The influence of menopausal hormone therapy (MHT) on the probability of developing diabetes mellitus in individuals with prediabetes remains uncertain. Methods: This retrospective cohort study, utilizing the TriNetX U.S. Collaborative Network, investigated cohorts, implemented propensity score matching, and analyzed outcomes associated with diabetes mellitus. The study focused on individuals aged 46-60 with prediabetes prior to menopause, categorizing them into MHT and non-MHT groups. Further stratified analyses, including variables such as age and race, were conducted to thoroughly examine potential variations in outcomes. Results: The study involved 6566 individuals (MHT and non-MHT), with propensity score matching ensuring balanced cohorts. Over a 20-year follow-up, the MHT group demonstrated a lower incidence of diabetes mellitus compared to the non- MHT group, with a Hazard Ratio of 0.693 (95 % CI: 0.577, 0.832). Stratified analyses revealed age-specific nuances, with significant protective effects in individuals aged 46-50 and 55-60. Additionally, ethnicity played a role, with MHT demonstrating significant benefits in White individuals but not in the Black or Asian populations. BMI analysis indicated a significant risk reduction with MHT in individuals with BMI less than or equal to 24.9 and 25-29.9 kg/m 2, but not in those with BMI greater than or equal to 30 kg/m 2. Conclusion: In our study, we demonstrate a sustained 20-year decrease in the risk of diabetes among premenopausal individuals with prediabetes who undergo menopausal hormone therapy.

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Predictive value of sarcopenia components for all-cause mortality: findings from population-based cohorts

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Background: Low grip strength and gait speed are associated with mortality. However, investigation of the additional mortality risk explained by these measures, over and above other factors, is limited. Aim: We examined whether grip strength and gait speed improve discriminative capacity for mortality over and above more readily obtainable clinical risk factors. Methods: Participants from the Health, Aging and Body Composition Study, Osteoporotic Fractures in Men Study, and the Hertfordshire Cohort Study were analysed. Appendicular lean mass (ALM) was ascertained using DXA; muscle strength by grip dynamometry; and usual gait speed over 2.4-6 m. Verified deaths were recorded. Associations between sarcopenia components and mortality were examined using Cox regression with cohort as a random effect; discriminative capacity was assessed using Harrell's Concordance Index (C-index).Results: Mean (SD) age of participants (n = 8362) was 73.8(5.1) years; 5231(62.6%) died during a me dian follow-up time of 13.3 years. Grip strength (hazard ratio (95% CI) per SD decrease: 1.14 (1.10,1.19)) and gait speed (1.21 (1.17,1.26)), but not ALM index (1.01 (0.95,1.06)), were associated with mortality in mutually-adjusted models after accounting for age, sex,

BMI, smoking status, alcohol consumption, physical activity, ethnicity, education, history of fractures and falls, femoral neck bone mineral density (BMD), self-rated health, cognitive function and number of comorbidities. However, a model containing only age and sex as exposures gave a C-index (95% CI) of 0.65(0.64,0.66), which only increased to 0.67(0.67,0.68) after inclusion of grip strength and gait speed. Conclusions: Grip strength and gait speed may generate only modest adjunctive risk information for mortality compared with other more readily obtainable risk factors.