

and detrimental effects (increases of triglycerides, subcutaneous fat, visceral fat and decrease of insulin sensitivity). In our study following body weight during 15 years therapy increase of body mass index were found (23.59–26.08 kg/m). Testosterone therapy decreases HDL, LDL, subcutaneous fat and increases triglycerides, visceral fat inducing increase in weight of +1.5 kg, =2.6 kg body fat and =3.9 kg lean body mass increasing risks for cardiovascular disease. Blood pressure, total and LDL cholesterol, LPL activity and insulin sensitivity are unaffected.

Conclusion: The complete endocrine milieu must be taken into account in order to achieve appropriate individual cross-sex hormone therapy doses and ways of application improving quality of life in transgender persons.

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Parallel Session: Premature ovarian dysfunction

INV23

Fertility and egg quality in survivors of childhood cancer



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The hugely increased rate of survival following childhood cancer is one of the major advances in modern medicine. However this comes at a cost in long-term health consequences for many survivors, prominent amongst which is the loss of fertility. The US-based childhood cancer survivor study has for many years provided authoritative analyses of the effects of cancer and its treatment on female fertility. These, with other studies, have highlighted the high risk from abdominopelvic radiotherapy, impacting uterine as well as ovarian function. A recent analysis has examined the effect of chemotherapy without radiotherapy on subsequent chance of live birth. This has shown largely reassuring results except for those exposed to some specific agents, but the impact was greater in those delaying childbirth till after age 30. Additionally, another analysis from the same group has highlighted that some childhood cancer survivors show subfertility, despite preserved ovarian function as reflected in normal menstrual cyclicality; the aetiology of this is as yet unclear but may indicate a loss of oocyte quality. Reassuringly, cancer therapies do not carry risks to the next generation. A population-based analysis of pregnancy after childhood cancer has shown that the risks of loss of fertility are markedly reduced in girls diagnosed more recently than 20 years ago for some diseases such as Hodgkin lymphoma, but have changed little for those with leukaemia. There is a pressing need to identify those at risk of loss of fertility to offer ovarian tissue cryopreservation where appropriate, as this is the only option for prepubertal girls.

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Parallel Session: Body composition and cardiometabolic health after menopause

INV24

Sarcopenic obesity in the elderly



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Human aging involves many changes, such as a variation in body composition. Different factors work together leading to an increase in fat mass, decreased muscle mass and reduced bone mass among seniors. These characteristic changes among elderly people may lead to suffer several diseases such as obesity, sarcopenia and osteoporosis and may result in decreased quality of life, increased dependence and increased risk of mortality in this population. In the late 90s, “sarcopenic obesity” (SO) was a concept that emerged in order to define those people who simultaneously have an excess of body fat and a significant loss of muscle mass. Evidence suggests that older adults with both sarcopenia and obesity have worse physical functioning than those with only one of these disorders; thus, sarcopenia and obesity may act synergistically, and together increase the risk of disability (1). In spite of the importance of SO, nowadays there is no consensus on its definition. Recently, for the first time in Spain (the elderly EXERNET multi-centre study) (2), it has been shown that the prevalence of SO in a representative sample of non-institutionalized seniors reaches values of 15%. Moreover, these figures can reach values higher than 20% when subject are older than 75 yrs. A strong relationship between both physically active and sedentary lifestyles and the level of adiposity is present. Thus, it is important to establish the relationship between physical activity and more importantly physical fitness of the elderly with SO. Higher levels of physical fitness are associated with a reduced risk of suffering SO and better perceived health among elderly. Elderly people with SO have lower physical functional levels than healthy counterparts do (3). Among the most used physical fitness tests, those that better predicted the risk of SO are leg strength, arm strength, agility, walking speed and balance in men and balance test and agility in women.

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Parallel Session: Vitamin D

INV25

Vitamin D and bone health



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Circulating vitamin D predominantly originates from cutaneous synthesis and therefore it should be considered as a hormone rather than a vitamin. Vitamin D deficiency (<50 nmol/L) is a worldwide epidemic with multiple implications on human health, due to its role in various physiological systems. Challenges and controversies are still ongoing regarding the best method of measuring vitamin D levels in the circulation. In spite of this, various studies have shown that with higher serum 25 hydroxyvitamin D levels, there is a decrease in the incidence of non-vertebral and hip fractures. There is limited research data on the management of vitamin D deficiency using therapeutic doses. The majority of studies focus on lower physiological doses rather than high pharmacological doses. In order to reach serum levels of 75 nmol/L from a deficiency

state, higher doses than 800–1000 IU/day are required. Future focus should be on the implications of a rise in systemic 25(OH)D3 levels from a deficiency state to 75 nmol/L on bone density and fracture risk, and the use of high doses in cases of vitamin D deficiency. Vitamin D treatment and supplementation need to be re-evaluated in the light of new evidence suggesting that high pharmacological doses need to be used in order to obtain the desired effect in the prevention of osteoporosis and recurrence of osteoporotic fractures.

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Parallel Session: Men's health

INV26

Obesity and the metabolic syndrome in older men



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Metabolic syndrome (MetS) is a relatively new medical phenomenon which was established as a clinical syndrome only in 2001. It comprises insulin resistance, hyperinsulinism, high triglycerides, decreased HDL, hypertension and overweight (obesity). The consequences of this syndrome are obvious: higher cardiovascular risks and diabetes. However, a number of urological diseases and abnormalities became directly related to MetS as well. The first is low testosterone which results in a number of symptoms such as loss of vitality, depression, muscle weakness, loss of libido, erectile and sexual dysfunction and in the long run osteoporosis. Over the age of 50 MetS is hence often associated with hypogonadism and/or LOH (Late Onset Hypogonadism). But LUTS (Lower Urinary Tract Symptoms) and BPH (Benign Prostatic Hyperplasia) are also directly linked to obesity as is the onset and progression of PCa (Prostate Cancer). In the presentation casual relationships between MetS in older man and urological symptoms will be elucidated and ways of treatments will be discussed.

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Parallel Session: The aging pelvic floor

INV27

Laser treatment for stress urinary incontinence



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Stress urinary incontinence (SUI) is defined as involuntary leakage of urine with increased intra-abdominal pressure. SUI is due to the progressive herniation of bladder, bladder neck and urethra from the anterior vaginal wall defect. Main defect in the anterior vagina is due to deficient collagen content of the endopelvic fascia.

On the other hand laser energy increases the temperature in the tissue. Cross links between the collagen helix are broken by increasing temperature. Finally laser can improve collagen structure and initiate neocollagenesis. Nowadays, there are increasing numbers of studies suggesting the beneficial effect of laser treatment on SUI, whereas in contrary. My goal is to evaluate and discuss the role of laser treatment on SUI in the light of current data.

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Society Symposium: Dutch Menopause Society

INV28

The impact of menopause on work ability in symptomatic women with severe menopausal symptoms



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Objective: To measure the impact of menopause on work ability in women with severe menopausal symptoms.

Study design: This cross-sectional study compared the work ability of a sample of otherwise healthy employed Dutch women ($n=205$) to a sample of first-time attendees of a menopause clinic ($n=60$); both aged 44 and 60 years. Self-reported questionnaire data assessing work ability (Work Ability Index; WAI) and menopausal symptoms (Greene Climacteric Scale; GCS) were used.

Main outcome measures: Logistic regression analyses were used to examine whether women with severe menopausal symptoms were more likely to have low work ability (<37.0 points) versus women in the reference group, after adjustment for individual and lifestyle factors.

Results: Symptomatic women had significantly higher total GCS scores (mean 26.7 vs 14.2, $t=10.8$, $P<0.001$) and significantly lower WAI scores (median 32.0 vs 40.0, $U=2380$, $P<0.001$) compared to the reference group. They were 8.4 times more likely to report low work ability than their healthy counterparts, 76.7% versus 30.2% (OR 8.4, 95% CI 4.1–17.2).

Conclusions: Over three-quarters of symptomatic menopausal women report serious problems dealing with the physical and mental demands of their work indicated by low work ability; hence these women might be at risk for developing future sickness absence.

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Parallel Session: Perimenopausal health

INV29

Menopause hormone treatment after gynecological cancers



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Some gynecological cancers can occur in relatively young women and part of their treatment consist is an oophorectomy. Some others can be cured by conservative treatment and thus women will undergo a natural menopause. In both situations but predominantly the first one, the question of a hormonal substitution is opened. The available literature abundantly demonstrates that premature ovarian insufficiency is associated with higher mortality from all causes, higher cardiovascular events mostly coronary heart diseases and bone osteoporotic fractures. It is thus important to know how and to who prescribe an hormonal