is either not expressed or is expressed at undetectable levels compared to ejaculated sperm, consistent with our observation that FAA is produced by the accessory sex glands and binds to sperm at ejaculation. Non-specific labeling with preimmune rabbit sera and secondary antibody controls was minimal, providing evidence that immunofluorescence with post-immune serum was specific. Immunofluorescent results were confirmed by Western blotting of sperm extracts.

Conclusions: Acrosomal cap localization of FAA in bulls suggests a potential role in regulating capacitation. Distinct localization of FAA to the equatorial segment of human spermatozoa is indicative of a potential regulatory role in sperm-egg interactions. These data are the first to demonstrate specific localization of FAA on bovine and human sperm. The importance of this protein in male fertility, and its fate during capacitation, is under investigation. Supported by TMI Laboratories, Tucson, AZ.

MENOPAUSE

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Effect of physiologic oral dehydroepiandrosterone (DHEA) replacement on exercise tolerance in postmenopausal women. Natalie Z. Burger, Elizabeth Protas, Bill Davis, John E. Buster, Sandra A. Carson, Peter R. Casson. Univ of Vermont, Burlington, VT; Univ of Texas Medical Branch, Galveston, TX; Univ of Houston, Houston, TX; Baylor Coll of Medicine, Houston, TX.

Objective: To evaluate the effect of physiologic oral DHEA (dehydroepiandrosterone) administration on exercise tolerance in a group of postmenopausal women with low endogenous DHEAS levels.

Design: Randomized, double-blinded, parallel, placebo-controlled trial with a dose titration protocol. The trial lasted one year.

Materials and Methods: Nineteen postmenopausal women were randomized to DHEA treatment (n=9) and placebo (n=10), given at 8: 00 am. The treatment group was given a 40 mg. daily dose of oral micronized DHEA (courtesy Belmar pharmacy, Lakewood CO) for one year, with monthly dose titration by an unblinded investigator to maintain levels of DHEA-S between 300 and 450 microgram/dL. The subjects were non smokers who were not on HRT. Among other parameters, standard aerobic exercise tolerance testing was performed at baseline and 1 year, measuring peak heart rate (PHR) and peak volume O_2 consumption (VO_2 peak). At the time of exercise testing, resting and peak cardiac outputs (QT-R and QT-P) were measured by a rebreathing technique. Statistical assessment was by ANOVA.

Results: Post treatment VO_2 peak, a measure of maximum aerobic capacity, was increased in the DHEA treatment group as compared to the placebo group (24.49 1.24 ml/kg/min vs.18.35 0.79; means SEM, P=0.019). Further, the change in VO_2 peak increased in the DHEA group, compared to a decrease in the placebo group (2.27 0.94 ml/kg/min vs.-1.15 0.64; means SEM, P=0.01). However, no significant differences were noted between the groups in cardiac output (at rest or during exercise) or peak heart rate.

Conclusion: Physiologic dose-titrated replacement of DHEA in postmenopausal women with low endogenous DHEAS levels appears to improve the maximum volume of oxygen consumed by the body each minute during exercise, one measure of capacity for aerobic work. This change is seen without other changes in exercise parameters that would indicate a central cardiac inotropic effect, although numbers are small. This preliminary data would support a peripheral effect of DHEA or its metabolites on improving exercise performance, perhaps at the level of muscle. We have previously demonstrated that DHEA supplementation may improve insulin sensitivity, and these findings may be a partial reflection of that change. In all, DHEA supplementation in postmenopausal women may possibly partially counteract the natural decline in aerobic capacity that occurs with aging.

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Comparison of cessation protocols of hormone replacement therapy on postmenopausal women: Immediate or tapered? Erdogan Aslan, Tayfun Bagis, Serkan Erkanli, Esra Bulgan Kilicdag, Ebru Tarim, G. Asik. Baskent University, Adana, Turkey.

Objectives: In our study, we aimed to determine whether there is a difference between the immediate and tapered cessation protocols of hormone replacement therapy (HRT) in terms of recurrence of menopausal symptoms (hot flushes, sweating) on patients in whom HRT discontinuation was indicated.

Design: A randomized, prospective clinical study.

Materials and Methods: Seventy consecutive patients in whom HRT was no longer indicated were recruited from the menopause clinic of Baskent University and rank randomized into two groups. In group1 (n=35), HRT was immediately discontinued and in group2 (n=35) the medication was used once every other day for two weeks and then discontinued. Every patient was questioned about the presence and severity of vasomotor symptoms before the initiation of HRT at the first visit, and then revisited at the end of two weeks and four weeks. During these visits vasomotor symptoms were noted on a symptom scale. Symptom scores were obtained by using the severity and frequency of symptoms. Scores were grouped as none, mild, moderate and severe.

Results: At the end of two weeks, in group 1, 17 patients (48%) had no symptoms, while there were mild, moderate and severe symptoms in 15 (42.9%), one (2.9%), and two (5.7%) patients respectively. In group 2, 16 patients (50%) had no symptoms and there were mild, moderate and severe symptoms in 13 (40.6%), two (6.3%), and one (3.1%) patients respectively.

At the end of four weeks, 16 patients (48.5%) had no symptoms, while there were mild, moderate and severe symptoms in 13 (39.4%), two (6.1%), and two (6.1%) patients respectively. In group2, 14 patients (45.2%) had no symptoms and there were mild, and severe symptoms in 15 (48.4%),and two (6.5%) patients respectively.

We did not find any statistically significant difference between immediate or tapered cessation of HRT in terms of symptom severity and frequency at the end of two and four weeks of discontinuation.

Presence or absence of the symptoms before the treatment did not affect the severity scores in both groups.

Conclusions: Tapering or immediate discontinuing of HRT did not effect the the recurrence rate and severity of menopausal symptoms.

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Pregnancies in menopausal women: A 12 year clinical study. Severino S. S. Antinori Sr., Severino Antinori. RAPRUI, Rome, Italy.

Objective: In our Center we have investigated the risk of pregnancy as well as foetal and maternal morbidity and mortality in menopausal women.

Design: Two thousand seven hundred twenty-nine candidates aged between fortyfive and sixtythree were strictly screened in order to admit them to an oocyte donation program.

Materials and Methods: We have established strict selection criteria in order to accept menopausal women for egg donation. 1150 patients out of 2729 candidates were accepted to the program 1579 were rejected during a rigorous selection criteria. We have excluded severe hypertension, cardiovascular and thromboembolic disease, smoking, hepatic diseases, tyroid and renal troubles and diabetes. Life expectancies of the couple was assessed taking into account a minimum of 25-30 years. The financial background was also evaluated. Psychosocial factors were carefully investigated prior the admittance to the program. The main factors which excluded their admittance are depression, anxiety, difficult links within the couple.The patients underwent a very rigorous check up, prior the beginning of the hormonal therapy based on the administration of oestradiole valerate (6 mg daily for the first 7 days and 12 mg daily from day 8 onwards) Progesterone was administered two days before the embryo transfer.

Results: We have admitted 1150 patients. Overall 489 pregnancies were established in 1288 recipient cycles, with 390 healthy babies delivered out of 363 pregnancies (28%) while 126 (25.7%) were lost.. In all 327 of the pregnancies reached full term, with 36 involving premature deliveries, 24 involving multiple gestation, 21 sets of twins three sets of triplets and no quadruplets. Antenatal complications arising in 86 ppatients included 33 preterm deliveries, 43 cases of gestational hypertension, four cases of preeclampsia, three cases of gestational diabetes and three of abruptio placentae.

Conclusions: Even if pregnancies are less dangerous in young women (20-29 years old) a menopausal woman can carry on and to term a pregnancy successfully. The obstetric risk is not higher than the one existing in the general population, when applying strict selection criteria.