

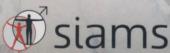








ONE



SOCIETÀ ITALIANA DI ANDROLOGIA E MEDICINA DELLA SESSUALITÀ

ROMA, 1 - 3 DICEMBRE 2016 CENTRO CONGRESSI FRENTANI

www siams info

ONE

ROME

TWO

DECEMBER

THREE

2016

GOLD	SEN COMMONICATIONS I	
GC 1	SEARCH FOR NEW PREDICTIVE PARAMETERS OF ASSISTED REPRODUCTION THROUGH ANALYSIS OF MALE GAMETE	1
GC 2	COPY NUMBER VARIATIONS OF E2F1: A NEW GENETIC RISK FACTOR FOR TESTICULAR CANCER	2
GC 3	DIFFERENTIAL EFFECTS OF TESTOSTERONE AND ESTRADIOL ON CLITORIS FUNCTION: AN EXPERIMENTAL STUDY IN RATS	3
GC 4	TESTOSTERONE (T) IS POORLY RELATED TO ERECTILE DYSFUNCTION (ED) IN YOUNG/MIDDLE AGED HUMAN IMMUNODEFICIENCY VIRUS (HIV)-INFECTED MEN	4
GOLD	EN COMMUNICATIONS II	
GC 5	MAY SPERM CRYOPRESERVATION IN YOUNG MEN BE A SOLUTION TO AVOID THE NEGATIVE IMPACT OF AGING ON SPERMATOZOA?	5
GC 6	PHOSPHODIESTERASE 5 INHIBITION INDUCES THE ACTIVATION OF HUMAN SKELETAL MUSCLE CELL METABOLISM	6
GC 7	IN VITRO EXPOSURE OF HUMAN SPERMATOZOA TO BISPHENOL A INDUCES PRO- OXIDATIVE/APOPTOTIC MITOCHONDRIAL DYSFUNCTION	7
GC 8	REPRODUCTIVE FUNCTION IN DIABETIC MEN: ROLE OF OXIDATIVE STRESS	8
ORAL	COMMUNICATIONS I	
OC 01	FATHERHOOD AFTER TESTICULAR CANCER – A RETROSPECTIVE STUDY	9
OC 02	ALFA 7 SUBUNIT OF NICOTINE RECEPTOR ON HUMAN SPERMATOZOA	10
OC 03	HOW MUCH DO UNIVERSITY STUDENTS KNOW ABOUT THEIR FERTILITY? RESULTS FROM THE "FUTURO FERTILE" SURVEY	11
OC 04	MOLECULAR STUDY OF HUMAN SPERM RNA: ROPN1 AND CABYR GENE EXPRESSION IN ASTHENOZOOSPERMIA	12
OC 05	MICRORNAS EXPRESSION PROFILE IN DIFFERENT TYPES OF AZOOSPERMIA	13
OC 06	DISCOVERY OF A RECESSIVE MUTATION IN THE GNRHR ASSOCIATED TO MATERNAL HETERO/ISODISOMY OF CHROMOSOME 4	14
OC 07	DECREASED MICRORNAS EXPRESSION IN PATIENTS WITH KLINEFELTER SYNDROME	15
OC 08	ASSESSMENT OF SEXUAL FUNCTIONING IN PEOPLE SUFFERING FROM SEVERE MENTAL ILLNESS:	16
OC 09	SUBJECTIVE PERCEPTION OF ORGASM SENSITIVITY IN FEMALE SEXUAL DISTRESS: VALIDATION AND STANDARDIZATION OF THE «FEMALE ORGASMOMETER»	17
ORAL	COMMUNICATIONS II	
OC 10	THE DUAL FXR/TGR5 AGONIST INT-767 COUNTERACTS NONALCOHOLIC STEATOHEPATITIS AND ERECTILE DYSFUNCTION IN A RABBIT MODEL OF HIGH FAT DIET-INDUCED METABOLIC SYNDROME	18
OC 11	EFFECTS OF DAILY TADALAFIL ON BODY COMPOSITION IN MEN WITH MILD ERECTILE DYSFUNCTION AND LOWER URINARY TRACT SYMPTOMS	19

COLDENIC

Pa

2

F

7

7

R

F

OC 12	SEXUAL AND PHYSICAL ABUSE DO NOT HAVE AN IMPACT ON FEMALE MATING STRATEGIES	20
OC 13	INTERNATIONAL INDEX OF ERECTILE FUNCTION FOR MASTURBATION: DEVELOPMENT OF A NEW DIAGNOSTIC TOOL	21
OC 14	AR AND VDR EXPRESSION IS ASSOCIATED WITH DISEASE PROGRESSION IN PATIENTS WITH PROSTATE CANCER	22
OC 15	INSL3/RXFP2 AXIS PROTECTS FROM MUSCLE ANABOLIC RESISTANCE AND FIBER LOSS IN ANIMAL ATROPHY MODEL	23
OC 16	INDEPENDENT ASSOCIATION BETWEEN OSTEOCALCIN AND TESTOSTERONE LEVELS IN MEN WITH CHRONIC SPINAL CORD INJURY	24
OC 17	IS SERUM ESTRADIOL (E2) REALLY INCREASED IN PATIENTS WITH KLINEFELTER SYNDROME (KS)? RESULTS FROM A META-ANALYSIS STUDY	25
OC 18	OSTEOCALCIN AND SEX HORMONE BINDING GLOBULIN COMPETE ON A SPECIFIC BINDING SITE OF GPRC6A	26
ORAL	COMMUNICATIONS III	
OC 19	EFFECTS OF PHYSICAL ACTIVITY OR METFORMIN ON TESTOSTERONE DEFICIENCY AND ERECTILE DYSFUNCTION ASSOCIATED TO METABOLIC SYNDROME	27
OC 20	EFFECTS OF DAILY TADALAFIL ADMINISTRATION ON DETRUSOR OVERACTIVITY IN YOUNG MALES WITH MULTIPLE SCLEROSIS AND ERECTILE DYSFUNCTION	28
OC 21	PSYCHOLOGICAL, RATHER THAN ORGANIC AND/OR RELATIONAL COMPONENTS ARE INVOLVED IN SEXUAL DYSFUNCTION IN YOUNG/MIDDLE AGED HUMAN IMMUNODEFICIENCY VIRUS (HIV)-INFECTED MEN	29
OC 22	HYPERHOMOCYSTEINEMIA E FOLATE DEFICIENCY: A ROLE IN ERECTILE DYSFUNCTION?	30
OC 23	SEMEN QUALITY IMPAIRMENT IS ASSOCIATED WITH SEXUAL DYSFUNCTION ACCORDING TO ITS SEVERITY	31
OC 24	SECRETOMIC ANALYSIS REVEALS FSH EFFECT ON SERTOLI CELLS	32
OC 25	HEAT SENSING RECEPTOR TRPV1 IS A MEDIATOR OF THERMOTAXIS IN HUMAN SPERMATOZOA	33
OC 26	LEFT VARICOCELE IN SUBFERTILE MEN: ROLE OF A CONTINUOUS SPERMATIC VEIN REFLUX BEFORE AND AFTER TREATMENT TO PREDICT IMPROVED SPERM PARAMETERS AFTER VARICOCELE CORRECTION	34
OC 27	AN "IN VITRO" COMPARATIVE STUDY OF DIFFERENT PREPARATIONS OF FOLLICLE- STIMULATING HORMONE ON PORCINE PRE-PUBERTAL SERTOLI CELLS	35
14	PRETEMONIZABRO ELAMBIA SHE NO KORASICARONATE CISA HORIAGUAN.	
	COMMUNICATIONS IV	
	ANDROGEN RECEPTOR GENE MUTATIONS IN PATIENTS WITH KLINEFELTER SYNDROME: CLINICAL CHARACTERISTICS, SEX HORMONES AND SPERM RETRIEVAL	36
OC 29	TARGETED NEXT GENERATION SEQUENCING ANALYSIS OF CONGENITAL ISOLATED HYPOGONADOTROPIC HYPOGONADISM	37
OC 30	CLINICAL PHENOTYPE OF KLINEFELTER SUBJECTS AT FIRST VISIT: THE PADOVA EXPERIENCE	38

Is serum estradiol (E2) really increased in patients with Klinefelter Syndrome (KS)? Results from a meta-analysis study

Santi D, Scaltriti S, Simoni M, Rochira V.

Unit of Endocrinology, Department of Biomedical, Metabolic and Neural Sciences, University of
Modena & Reggio Emilia

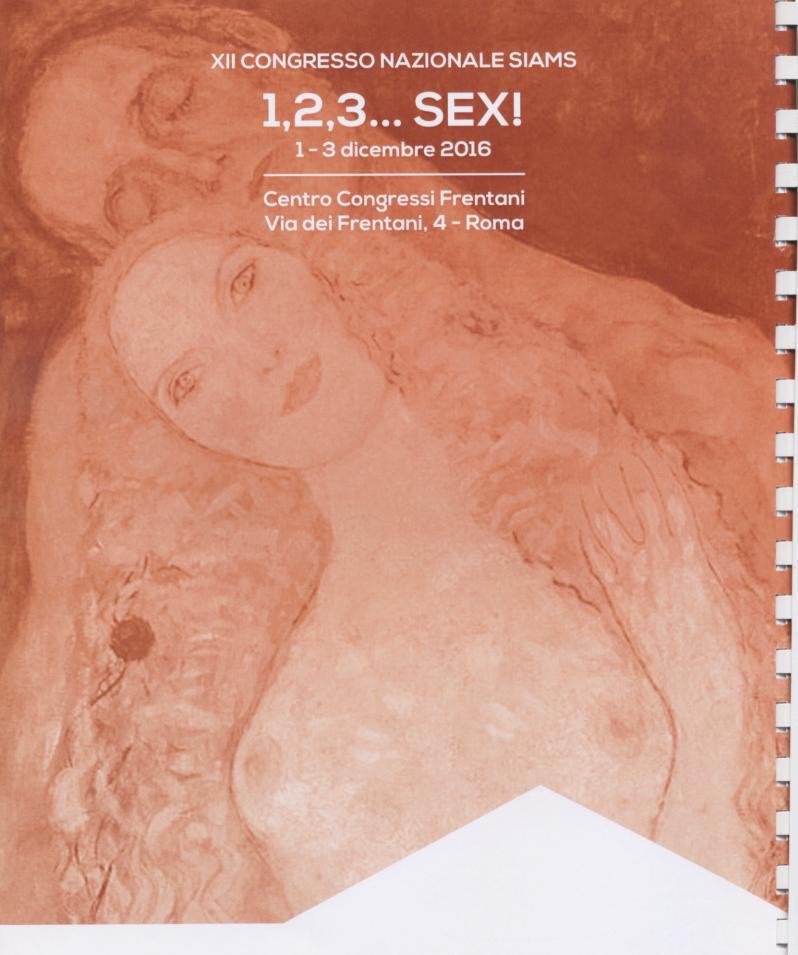
<u>BACKGROUND</u>: KS has been classically described as characterized by hyperestrogenism and elevated serum E2 together with increased gonadotropins and low-to-normal serum testosterone (T). In literature, data on increased serum E2 are not solid. The aim of this study is to meta-analyse data from studies evaluating serum E2 in both KS and healthy subjects (HS) in order to verify if E2 is increased in KS.

<u>METHODS</u>: An extensive MEDLINE was performed using 'PubMed' with the following key words: 'KS' and 'E2' or 'T' or 'sex steroids' from 1946 to January 2015 (Current Contents-ISI was used for searching oldest studies). All studies (case-control, case-series, case-reports) reporting E2 measurement were considered. Controlled-studies were used for meta-analysis. Only serum E2 at baseline (no ongoing treatments) was included. Meta-analysis was conducted according to the PRISMA statement using RevMan.

RESULTS: Out of 956 articles, 26 case-control studies, 15 case-series and 21 case-reports had data on serum E2. A total of 878 KS and 1000 HS were included in the meta-analysis. Serum E2 was significantly higher in HS than in KS, with a mean difference of 7,93 pg/mL (CI: 2,24,13,61;p=0,006), with a chi-squared=688,32 (I-square=97%) (Figure 1). Serum T was significantly lower in KS than in HS, with a mean difference of -2,79 ng/mL (CI:-3,46,-2,11;p<0,001), with a chi-squared=198,29 (I-square=89%). Data from case-series and case-reports confirmed that E2 is not above the normal range in KS.

	Kline	felter patier	nts	Heal	thy subjects			Mean Difference		Mean Difference
Study or Subgroup	Mean	SD	Total	Mean			Weight	IV, Random, 95% CI	Year	IV, Random, 95% CI
Wang C 1975	34	64.32	19	16	38.46	20	1.8%	18.00 [-15.47, 51.47]	1975	
Smith DA 1977	25.61	11.74	29	31.87	12.48	84	4.9%	-6.26 [-11.30, -1.22]	1977	
Forti G 1978	28	9	15	12.3	5.1	17	4.9%	15.70 [10.54, 20.86]	1978	
Barbarino A 1979 (1)	37	11.31	8	20.08	6.6	4	4.4%	16.92 [6.76, 27.08]	1979	
Plymate SR 1983	44	6	5	35	6	5	4.7%	9.00 [1.56, 16.44]	1983	
Winters SJ 1983	36	0.1	1	32.5	12.86	6	4.4%	3.50 [-6.79, 13.79]	1983	
Giagulli VA 1988	22.69	11.5	28	31.6	10.62	20	4.8%	-8.91 [-15.22, -2.60]	1988	
Eulry F 1993	23	9	16	33.7	11	16	4.8%	-10.70 [-17.66, -3.74]	1993	
Luisetto G 1995	49	27.1	32	39.3	16.4	24	4.2%	9.70 [-1.75, 21.15]	1995	
Luboshitzky R 1996	28.87	4.36	6	18.25	1.09	7	5.0%	10.62 [7.04, 14.20]	1996	
Luboshitzky R 1997	30.48	4.36	11	18.25	1.09	7	5.1%	12.23 [9.53, 14.93]	1997	-
Ozata M 2000	70.13	34.92	9	53.42	18.14	22	2.7%	16.71 [-7.33, 40.75]	2000	
Kamischke A 2003	21.52	10.05	85	21.79	12.23	244	5.1%	-0.27 [-2.90, 2.36]	2003	+
Tomasi PA 2003	103	89.79	14	80.8	64.32	39	1.0%	22.20 [-28.98, 73.38]	2003	
Wielgos M 2004	58.24	12.1	14	47.62	9.98	12	4.6%	10.62 [2.13, 19.11]	2004	 -
Yesilova Z 2004	68.81	5.32	32	30.55	5.51	20	5.1%	38.26 [35.22, 41.30]	2004	+
Yesilova Z 2005	69.92	6.55	13	32.56	4.95	9	4.9%	37.36 [32.55, 42.17]	2005	-
Bojesen A 2006	24.52	39.65	35	34.05	97.83	71	2.4%	-9.53 [-35.80, 16.74]	2006	
Host C 2010	24.52	28.2582	19	34.5975	48.3051	20	2.6%	-10.08 [-34.77, 14.61]	2010	
Bojesen A 2011	44.945	142.8232	70	34.045	97.8258	71	1.4%	10.90 [-29.56, 51.36]	2011	- + •
Ferlin A 2011	27.21	10.02	112	16.83	2.51	51	5.1%	10.38 [8.40, 12.36]	2011	+
Foresta C 2012	27.62	9.75	92	26.1	9.32	50	5.0%	1.52 [-1.74, 4.78]	2012	+
Selice R 2013	30.21	9.37	121	25.93	8.99	60	5.1%	4.28 [1.46, 7.10]	2013	
Pasquali D 2013	29	33.23	69	33	27.71	48	4.3%	-4.00 [-15.09, 7.09]	2013	
Chang S 2014	26.08	60.31	23	29.585	126.8016	73	1.6%	-3.51 [-41.63, 34.62]	2014	
Total (95% CI) 878 1000 100.0% 7.93 [2.24, 13.61]										•
Heterogeneity: Tau ² = Test for overall effect:			2, df = 1	24 (P < 0.0	00001); I ² =	97%				-50 -25 0 25 Men with KS Healthy subjects

<u>CONCLUSIONS</u>: Serum E2 is not increased in KS and is significantly lower than in HS in this meta-analysis. The limits of this study are the heterogeneity of methods for steroids measurement and the lack of studies having the comparison of serum E2 between KS and HS as primary endpoint. The traditional belief that KS is associated to elevated E2 should be reconsidered together with some pathophysiological and clinical issues.



SEGRETERIA ORGANIZZATIVA

FASI s.r.l Via R. Venuti, 73 - 00162 Roma Tel. 06.97605610 Fax 06.97605650 FASI info@fasiweb.com www.fasiweb.com