of therapy and also underlines the importance of duration of therapy (3 and 6 months). The study demonstrated that an increase of seminal carnitine and glucosidase positively impacted upon the patient progressive sperm motility.

Supported by: Sigma-tau HealthScience provided Proxeed Plus product for the study.

P-512 Wednesday, October 19, 2016

POTENTIAL IMPACT OF THE CAP-SCORE TEST™ ON CLINICAL PREGNANCY AND MEDICAL COSTS IN COUPLES WITH UNEXPLAINED INFERTILITY. J. B. Babigumira,[a] F. Sharara,[b] L. P. Garrison.[c] [a]Global Health, University of Washington, Seattle, WA; [b]Virginia Center for Reproductive Medicine, Reston, VA; [c]Pharmacy, University of Washington, Seattle, WA.

OBJECTIVE: Sperm capacitation is a necessary precursor to fertilization. The Cap-Score™ was developed to assess the capacitation status of men. This enables personalized management of infertility for some couples by selecting among timed intra-uterine insemination (IUI), versus moving immediately to in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI) in those with a low Cap-Score™. The objective of this study was to estimate the differences in clinical pregnancy rates and medical costs comparing the use of the Cap-Score™ with timed IUI (CS-TI) and the current standard of care (SOC), namely 3 IUI cycles followed by 3 IVF-ICSI cycles.

DESIGN: Decision-analytic modeling.

MATERIALS AND METHODS: We developed and parameterized a decision-analytic model of management of unexplained infertility for a hypothetical woman 35 to 37 years of age, using her own eggs, based on data from published and unpublished sources. Model parameters are shown in the table. We calculated the clinical pregnancy rates and medical costs comparing CS-TI and SOC. We conducted univariate sensitivity analyses. The test has not yet been launched, and no price has been established, so the medical costs include only other costs.

RESULTS: Compared to SOC, CS-TI is projected to increase the cumulative pregnancy rate by 1.7% (94.2% vs. 92.5%). This increase varies from 0.8% to 3.2% depending on the assumed pregnancy success rate of IVF. Compared to SOC, CS-TI is projected to reduce mean medical costs by $4,621 ($19,319 vs. $23,941). Sensitivity analysis places the range of this cost reduction from $2,700 to $6,500 per individual patient depending on the costs of IVF-ICSI. CS-TI is projected to reduce mean IUI costs by $715 ($6,734 vs. $6,019) and mean IVF-ICSI costs by $3,906 ($17,207 vs. $13,301) compared to SOC.

CONCLUSIONS: Use of the Cap-Score™ to personalize management of couples with unexplained infertility is projected to result in higher clinical pregnancy rates and reduced medical costs.

Table of Parameter Estimates used in the Model

Parameter	Baseline Estimate	Sensitivity Range	Reference
Costs (all 2016 $US)			
IUI	$2,550	$1,275 — $3,825	Expert (+/- 50% SR)
IVF-ICSI	$15,000	$7,500 — $22,500	Expert (+/- 50% SR)
Pregnancy Probabilities			
IUI in SOC	0.125	0.100 — 0.150	Expert (+/- 20% SR)
IUI after Cap-Score	0.400	0.320 — 0.480	Expert (+/- 20% SR)
IVF-ICSI	0.519	0.415 — 0.632	SART weighted mean for 35 — 37 (+/- 20% SR)
Low Cap Score	0.385	0.308 — 0.462	Travis et al. poster (+/- 20% SR)

References:

1. Society of Assisted Reproductive Technology (SART). Accessed on 05/01/2016 at https://www.sartcorsonline.com.
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Supported by: Androvia Life Sciences.

P-513 Wednesday, October 19, 2016

SOURCES OF KNOWLEDGE AND EFFECT OF EDUCATION ON UROLOGISTS' ATTITUDES TOWARDS PENILE TRANSPLANTATION. B. B. Najari,[a] P. V. Bach,[b] A. Bolyakov,[a] R. Lischer,[a] D. Paduch.[c] [a]Urology, Weill Cornell Medical College, New York, NY; [b]Weill Cornell Medical College, New York, NY; [c]Dept of Urology, Weill Cornell Medical College, New York, NY.

OBJECTIVE: While penile transplantation (PT) has long been surgically feasible, only two such procedures have been performed worldwide. Despite the potential for improved quality of life in men who have experienced genitourinary trauma, there is a dearth of information regarding barriers to implementation of PT programs. Our objective was to evaluate the source of knowledge and effect of education on urologists' attitudes towards PT.

DESIGN: Online Survey.

MATERIALS AND METHODS: An online survey was sent to members of the American Urological Association (AUA) using the SurveyMonkey platform. Respondents were asked from what sources they had learned about PT. Respondents were also asked if they are in favor of (1) organ transplantation in general, (2) transplantation of visceral organs that prolong life (i.e. kidney), (3) transplantation of organs that improve quality of life (i.e. face), and (4) PT. The responses ranged from "Extremely in favor (1)" to "Not at all in favor (5)". The PT question was repeated after reading a book excerpt about soldiers' concerns about genitourinary trauma.

RESULTS: Two hundred twenty eight urologists responded to the survey. Only 75 people (32.9%) had learned about PT from a professional health source (scientific journal, professional colleage, or formal lecture). One hundred twenty six (55.3%) of respondents had learned about PT from the mass media and 45 (19.7%) had no knowledge of PT. At baseline, the participants were significantly less if favor of PT [mean (SD) 2.4 (1.2)], than other forms of organ transplant (Table). After reading the book excerpt, attitudes toward PT significantly improved to 2.2 (1.1), $p<0.001$. White respondents had a more favorable opinion of PT after reading the book excerpt compared to non-whites [2.1 (1.1) vs. 2.9 (1.4), $p=0.009$]. Respondents older than 54 also had a more favorable opinion after reading the book excerpt [2.0 (1.0) vs. 2.3 (1.2), $p=0.027$] compared to younger respondents. Older respondents were also more likely to be in favor of PT being covered by veteran's health care plan [2.0 (1.1) vs. 2.3 (1.3), $p=0.047$]. Older respondents were more

Attitudes Toward Penile Transplantation Before and After Excerpt

	Overall Mean (SD)	p value
In favor of penile transpantation? (Baseline)	2.4 (1.2)	Reference
In favor of organ transplantation?	1.6 (0.9)	<0.001
In favor of organ transplantation to prolong life?	1.2 (0.5)	<0.001
In favor of organ transplantation for QOL?	1.9 (0.9)	<0.001
In favor of penile transplantation insurance coverage?	2.2 (1.2)	0.290
In favor of penile transpantation? (After reading)	2.2 (1.1)	<0.001