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CONCLUSIONS: In a large subset of patients presenting to a single institution for fertility assessment at a single lab, semen volume and sperm morphology significantly worsened over more than two decades. The etiologies and driving forces changing semen parameters over time remains to be determined.

O-60 3:15 PM Saturday, October 17, 2020

VIDEO VISITS ALLOW FOR MANAGEMENT OF MALE INFERTILITY ACROSS A BROAD SPECTRUM OF DIAGNOSES. Juan J. Andino, MD, MBA, Alex Zhu, DO, Stephanie Daignault-Newton, MS, Chad Ellimootil, MD, MS, James M. Dupree, IV, MD, MPH. Michigan Medicine Ann Arbor, MI.



OBJECTIVE: While the COVID-19 pandemic has resulted in a rapid expansion of telehealth services, it remains unknown how video visits, a form of telehealth, can be used to treat male infertility. We sought to evaluate what infertility diagnoses were seen and how they were managed through telehealth. Herein we summarize a single institution's experience with video visits for male infertility prior to COVID-19.

DESIGN: Retrospective case series of patients with male infertility managed via video visits.

MATERIALS AND METHODS: We identified video visits completed at our institution between August 21, 2017 and March 17, 2020 for male infertility. All men had a previous in-person examination. We collected patient demographic and referral information, grouped primary diagnoses, categorize what management steps were taken, and determined whether in-person examinations were needed within 90 days.

RESULTS: 70 video visits were completed by 56 men. The median age was 36 years (interquartile range 32 - 40), 78.5% were white, and most patients were referred by their primary care provider or their partner's reproductive endocrinologist (47% and 33%, respectively). Most men were diagnosed with endocrinologic (29%) or anatomic (21%) contributors to infertility. See Table1A for full diagnostic categories.

73% of video visits involved reviewing results such as semen analysis and hormonal testing. 30% of visits involved counseling for assistive reproductive technologies (ART) and, in 25% of visits, hormonally active medications were prescribed. See Table1B for all management categories. There were only two in-person visits within 90 days after a video visit, both of which were planned post-operative visits.

TABLE 1. Diagnostic categories of and management through video visits

	Proportion
A. Diagnostic categories	
Endocrinologic (hypothalamic-pituitary-gonadal axis)	29%
Anatomic (e.g., varicocele, vasectomy, CBAV)	21%
Idiopathic	16%
Treatment-related concerns (e.g. cancer therapy or medication impact)	9%
Concurrent partner evaluation	9%
Genetic abnormalities	7%
Ejaculatory failure	6%
DNA integrity	4%
Total	100%
B. Male infertility management	Proportion*
Review of results	73%
ART counseling	30%
Medication management	25%
Sperm extraction counseling	14%
Varicocelectomy counseling	13%
Cryopreservation counseling	4%
Referral to other specialists (REI, genetics)	3%

*Visits included multiple management categories; totals do not equal 100%.

CONCLUSIONS: Video visits can be used with established patients to manage a broad spectrum of diagnoses that contribute to male infertility. In the short-term, these visits serve as substitutes for clinic visits without resulting in additional in-person encounters.

SUPPORT: Dr. James M. Dupree receives Grant Funding from Blue Cross Blue Shield of Michigan for quality improvement work with the Michigan Value Collaborative

PATIENT EDUCATION AND SUPPORT

O-61 9:40 AM Sunday, October 18, 2020

MILITARY SERVICE AND MEDICAL ASSOCIATIONS WITH INFERTILITY IN U.S. VETERANS.



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OBJECTIVE: Studies suggest U.S. military Veterans have higher rates of poor reproductive outcomes due to unique exposures and complex health challenges. Our objective was to identify associations between lifetime infertility measures and key military service/medical characteristics in Veterans.

DESIGN: Cross-sectional survey study of 1407 female and 1601 male U.S. Veterans aged 20-45.

MATERIALS AND METHODS: Data were collected using computer-assisted telephone interviews. Infertility prevalence and key military service/medical characteristics were analyzed by sex. Lifetime infertility was defined as: 1) twelve or more consecutive months of unprotected intercourse without pregnancy (UI), 2) twelve or more months of trying before any pregnancy (TTP), and 3) ever diagnosis of infertility in participant and/or partner (DX). For depression, eating disorder, and PTSD, Veterans were screened for current disease and self-reported ever diagnosis.

RESULTS: 84.9% reported ever unprotected intercourse and of those 49.6% reported having twelve or more consecutive months without pregnancy. Among those ever pregnant (65.3%; n=919), 45.3% (n=416) reported twelve or months of TTP. Overall, 11.7% (n=165) reported ever being diagnosed with infertility. There were no statistically significant associations between age of enlistment, ever deployed or duration of deployment and any of the 3 infertility measures for female or male Veterans.

Ever deployed male Veterans with infertility were more likely to have been under enemy fire or at risk of IED injury than ever deployed male Veterans without infertility (UI measure, p=0.04). Ever PTSD diagnosis was associated with the DX infertility measure for women (p=0.01) and with UI (p=0.003) and DX (p=0.04) infertility measures for men. Female Veterans with infertility (UI measure) were also more likely to screen positive for current PTSD (p=0.02).

Female Veterans with lifetime infertility (UI measure) were more likely to have ever smoked than female Veterans without infertility (p=0.046). Higher BMI was associated with infertility in female Veterans by all 3 infertility measures (p=0.02-0.0003). Neither of these associations was seen in male Veterans.

Ever diagnosis of depression was more likely in female Veterans with lifetime infertility (by TTC p=0.03 and DX p=0.0002) but not in their infertile male counterparts. Current depression, ever diagnosis of anxiety disorder, and ever diagnosis of or current eating disorder were not significantly associated with any infertility measure in female or male Veterans.

CONCLUSIONS: Consistent with general population studies, several general health-related factors were found to be associated with infertility in women Veterans but not in men. More research is needed regarding the role of traumatic deployment experiences in male Veteran infertility. The role of PTSD as a mediator or moderator, or alternatively an outcome, of infertility for both male and female Veterans also requires additional research to examine the timing of this association. Our results provide evidence to help inform Veteran- and sex-specific infertility care.

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THE IMPACT OF AN INTERACTIVE E-LEARNING PLATFORM ON PATIENT COMPREHENSION REGARDING INFERTILITY TREATMENT: A RANDOMIZED CLINICAL TRIAL. Ashley K. Barbour,



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