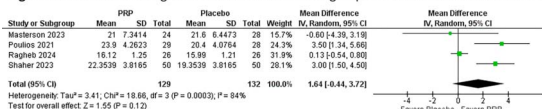
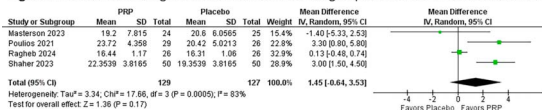
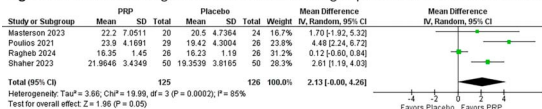
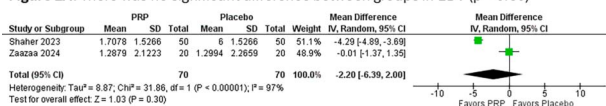
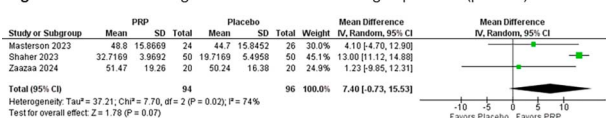


Figure 1A. There was no significant difference between groups in the IIEF-EF score at 1 month ($p = 0.12$)**Figure 1B.** There was no significant difference between groups in the IIEF-EF score at 3 months ($p = 0.17$)**Figure 1C.** There was no significant difference between groups in the IIEF-EF score at 6 months ($p = 0.05$)**Figure 2A.** There was no significant difference between groups in EDV ($p = 0.30$)**Figure 2B.** There was no significant difference between groups in PSV ($p = 0.07$)

Source of Funding: None

IP10-17**INCIDENCE OF OBSTRUCTIVE SLEEP APNEA IN PATIENTS TAKING TESTOSTERONE REPLACEMENT THERAPY STRATIFIED BY OSA RISK FACTORS**

Kathleen Li*, Rochester, NY; Thomas Chen, New York, NY; Parth Joshi, David Peters, Mineola, NY

INTRODUCTION AND OBJECTIVE: The relationship between hypogonadism, testosterone replacement therapy (TRT), and obstructive sleep apnea (OSA) is well-documented but poorly understood. Low testosterone and OSA are believed to be connected because testosterone production is linked to sleep patterns, especially rapid eye movement (REM) sleep. Moreover, TRT is typically contraindicated in OSA patients. However, due to the lack of evidence for a causal relationship between TRT and OSA, this study aims to further investigate the role of TRT in OSA occurrence in people with established risk factors.

METHODS: Using EPIC System's SlicerDicer feature, we retrospectively collected single institution data of patients diagnosed with low testosterone or hypogonadism and subsequently started on TRT within 6 months from 7/1/2014 to 7/1/2024. Patients were stratified by OSA risk factors and assessed for OSA incidence within 2 years after starting TRT. Females were excluded. Data analyzed descriptively and with chi-square/z-test analyses via Microsoft Excel.

RESULTS: Of 6,405 hypogonadal patients on TRT, 14% ($n = 921$) were diagnosed with OSA after starting TRT, compared to a 12% rate of OSA in all patients with hypogonadism. There was a significant association between OSA development after starting TRT and obesity ($p < .00001$), family history of sleep apnea ($p < .00001$), alcohol consumption ($p < .00001$), smoking status ($p = .00004$), age ($p = 0.00017$), and race ($p = .00259$). Among patients taking TRT, lower incidences of OSA were associated with patients who are younger (< 50 years old, $p = .00570$), non-obese ($p < .00001$), and have no smoking history ($p = .00019$), alcohol consumption ($p < .00001$), nor family history ($p < .00001$). TRT was also associated with increased incidence of OSA in patients with any of the OSA risk factors listed above.

CONCLUSIONS: Our findings suggest that the presence of OSA risk factors may alter the effect of TRT on OSA incidence, where TRT is associated with lower incidence in people without risk factors and higher incidence in people with risk factors. Using our results, clinicians may counsel prospective TRT patients about their risk of developing OSA based on the presence of OSA risk factors. Furthermore, our data supports the contraindication of TRT in people at risk of OSA.

Table 1

Rate of OSA Incidence with TRT Use by OSA Risk Factors with Chi-Square Analyses

	OSA, n = 921		No OSA, n = 5,484		Total, N = 6,405		
	n	%	n	%	n	%	p-value
AGE*							.00017*
	<30	15	1.6	159	2.9	174	2.7
	30-40	34	3.7	346	6.3	380	5.9
	40-50	136	14.8	806	14.7	942	14.7
	50-60	242	26.3	1,350	24.6	1,592	24.9
	60-70	308	33.4	1,556	28.4	1,864	29.1
	>70	186	20.2	1,267	23.1	1,453	22.7
RACE*							.00259*
	White	707	76.8	4,066	74.1	4,773	74.5
	Black or AA	55	6.0	372	6.8	427	6.7
	Asian	32	3.5	98	1.8	130	2.0
	Others	126	13.7	859	15.7	985	15.4
SMOKING STATUS*							.00004*
	Current	56	6.1	390	7.1	446	7.0
	Former	360	39.1	1,725	31.5	2,085	32.6
ALCOHOL CONSUMPTION*							<.00001*
	Never	540	54.5	3,330	60.7	3,872	59.8
	<7/week	453	49.2	1,935	35.3	2,388	37.3
FAMILY HISTORY*							<.00001*
	7-14/week	50	5.4	298	5.4	348	5.4
	14-21/week	17	1.8	99	1.8	116	1.8
	>21/week	10	1.1	29	0.5	39	0.6
OBESITY*							<.00001*
	Never	391	42.5	3,123	56.9	3,514	54.9
	Sleep Apnea	14	1.5	20	0.4	34	0.5
	No Sleep Apnea	907	98.5	5,464	99.6	6,371	99.5
	Yes	299	32.5	612	11.2	911	14.2
	No	622	67.5	4,872	88.8	5,494	85.8

Note. OSA = Obstructive Sleep Apnea; TRT = Testosterone Replacement Therapy; AA = African American

* $p < .05$

Source of Funding: None

IP10-18**DOES KIDNEY TRANSPLANTATION IMPROVE ERECTILE FUNCTION? A PROSPECTIVE COHORT ANALYSIS OF END-STAGE RENAL DISEASE PATIENTS PRE AND POST KIDNEY TRANSPLANTATION IN MEXICO**

Diana María Ortiz-Martínez, Cuauhtémoc, Mexico; Jorge Augusto Alcacio-Mendoza*, Tlalpan, Mexico; Eduardo Jimenez-Cisneros, P.S. Arrollo-Paredes, V.J. Visag-Castillo, Cuauhtémoc, Mexico

INTRODUCTION AND OBJECTIVE: Erectile dysfunction (ED) affects 50-80% of patients with end-stage renal disease (ESRD), resulting from multifactorial etiology. Kidney transplantation has been documented to improve hormonal dysfunctions and sexual health. This study aimed to determine if patients with ESRD who underwent kidney transplantation in 2022-2023 experienced improvement in erectile dysfunction after surgery.

METHODS: An observational, prospective study was conducted on male patients with ESRD who underwent kidney transplantation at Hospital General de México between January 22-24. Demographic and clinical data were collected, including age, presence of diabetes mellitus, hypertension, smoking, antihypertensive use, and time on dialysis. Erectile function was assessed using the International Index of Erectile Function (IIEF-5) before transplantation and 6 months after intervention.

RESULTS: The study included 30 male patients with a mean age of 45.3 years. Significant improvements were observed in all individual IIEF-5 questions and total score. The mean total IIEF-5 score increased from 15.43 to 19.87 (mean improvement 4.43 points, $p < 0.001$). The patients without ED increased from 10% to 43.3%. Confidence in maintaining erections improved by 0.70 points ($p < 0.001$), frequency of rigid erections by 1.00 points ($p < 0.001$), ability to maintain erections by 0.90 points ($p < 0.001$), and sexual satisfaction by 0.93 points ($p < 0.001$). Younger age was associated with greater improvement ($r = -0.42$, $p < 0.05$). Diabetes mellitus was a negative predictor ($OR = 0.35$, $p < 0.05$). Prolonged dialysis showed less favorable outcomes, though not statistically significant.