recurrent UTI at presentation (57% vs. 26%, p<0.001). Model performance (Figure 1) was highest for the combined model (AUROC 0.84, AUPRC 0.87), followed by qVUR (AUROC 0.80, AUPRC 0.85) and grade (AUROC 0.81, AUPRC 0.82). While AUROC values for qVUR and grade models were comparable (p>0.05), qVUR demonstrated superior AUPRC compared to traditional grading alone.

Conclusions: Quantitative metrics enhanced model performance in predicting renal scarring. qVUR provides the additional benefit of objectivity in measurement compared to VUR grade, which incurs subjectivity. Our data highlights the need for heightened clinical suspicion in patients who are older at presentation or have ureteral dilation.

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MP 11.14. Table 1. Baseline clinical information and VCUG findings for VUR patients with DMSA renal scan

Test variable	Total cohort= 130 patients (163 renal units)	Non-scarred= 58 patients (84 renal units)	Scarred= 72 patients (79 renal units)	p
Age in months (IQR)	17.8 (57.5)	7.15 (27.9)	46.5 (56.1)	<0.001*
Male/Female	61/69	30/28	31/41	0.38
Single UTI n (%)	84 (64)	30 (52)	54 (75)	0.005*
Recurrent UTI n (%)	56 (43)	15 (26)	41 (57)	<0.001*
Hydronephrosis at presentation n (%)	34 (21)	15 (18)	19 (24)	0.34
Bilateral VUR n (%)	84 (64)	42 (72)	42 (58)	0.10
High grade VUR (IV & V) n (%)	68 (42)	25 (29)	43 (54)	0.001*
Ureteral tortuosity ratio (IQR)	1.07 (0.17)	1.07 (0.23)	1.07 (0.13)	0.83
Max ureteral width (IQR)	10.3 (8.55)	9.62 (9.08)	11.3 (10.5)	0.10
Proximal ureteral width (IQR)	6.47 (4.60)	5. 73 (4.15)	7.09 (5.46)	0.19
Distal ureteral width (IQR)	6.99 (5.35)	6.86 (5.43)	7.07 (5.35)	0.81

*Statistically significant.

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MP 12.1

In-clinic verapamil injections for Peyronie's disease: A retrospective study on patient sexual satisfaction

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Introduction: Peyronie's disease (PD) is an acquired curvature of the penis that affects 5–10% of men and is associated with psychological distress. Intralesional clostridium collagenase (Xiaflex) and interferon have been removed from Canada, leaving verapamil as the only effective therapy available to our patients. The results of intralesional verapamil (ILV) are variable depending on dosing, injection protocols, and practitioner technique. Surgical treatment of PD endorses substantial risk of penile length loss and erectile dysfunction, which most patients prefer to avoid. We aimed to evaluate our experience with ILV to determine whether off-label ILV provides satisfactory results to men with PD and avoids more invasive interventions.

Methods: We conducted a retrospective, multicenter cohort study of 224 men who completed ILV treatment between January 1, 2021, and December 31, 2024, performed by three urologists. A dorsal penile block was performed, and verapamil was injected using FAN technique into the PD scar. Subjective clinical data was retrieved from initial consultation and followup visits through our electronic records.

Results: The mean age was 57 years, with a majority of men having an upward curvature (57.8%), between 30–45 degrees (43.9%). The mean onset of the curvature was 20.4 months before the initial consult, with a disease stability of 11.3 months. Risk factors, including erectile dysfunction (45.2%), diabetes (11.7%), and active smoking (13.5%) were evaluated. The curvature was initially impairing sexual intercourse for 59.6% of patients. After ILV treatment protocol, 79.1% of patient curvatures were subjectively improved, with 93.9% of men being able to engage in sexual intercourse, an increase of 53.5%. Only 14.8% required subsequent surgical treatment for their PD.

Conclusions: Our ILV treatment protocol helps men regain their ability to engage in sexual intercourse, provides a subjective lesser degree of curvature, and reduces the need to undergo more invasive interventions.

MP 12.2

Role of gender-affirming hormone therapy in spermatogenesis: Analysis of testicular histological specimens

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Introduction: Sperm retrieval as part of fertility preservation in trans and gender-diverse individuals, assigned male at birth, can be challenging, and the current recommendation calls for cessation of gender-affirming hormone therapy (GAHT). The impact of specific androgen blockers as part of GAHT on spermatogenesis is poorly understood. Clarity on the impact of GAHT on gonadal function and spermatogenesis is necessary for optimizing evidence-based counseling regarding fertility preservation strategies and GAHT choice for those wishing to preserve fertility.

Methods: This is a retrospective cohort study of patients who underwent gender-affirming orchiectomy, either as a standalone procedure or as part of gender-affirming vaginoplasty, between November 2017 and January 2024. The primary exposure variables were the type and duration of gender-affirming hormone therapy regimen that the patients were taking prior to the orchiectomy. The main outcome measure was spermatogenesis stage per histologic evaluation.

Results: In total, 287 patients were included in the study and 573 testis specimens were reviewed. The mean age at surgery was 33.9 years (SD 11.7, range 18.4–80.6) and the duration of GAHT was 3.8 years (SD 3.0, range 1–28). Older age was associated with impairment in spermatogenesis, with a mean age of 41.4 years (SD 12.8, range 23.0–66.5) for end-stage testis failure and a mean age of 33.4 years (SD 11.2, range 20.2–80.6) for complete maturation (p=0.002). Hormone therapy duration did not show a significant difference between groups (p=0.22). Gender-affirming hormone therapy included estrogen (n=287, 100%), progesterone (n=73, 25%), and an anti-androgen (n=257, 90%). Cyproterone-acetate (n=127, 44%) and spironolactone (n=110, 38%) were the most common anti-androgens used. Spermatogenesis was most significantly impaired with the use of cyproterone-acetate, with only 8.7% of patients having active spermatogenesis vs. 53.3% of patients taking spironolactone (p<0.001). Progesterone use had an independent negative effect on spermatogenesis (p=0.005). In a multivariate regression analysis, cyproterone-acetate (OR 3.89, 95% CI 1.01–14.95) and progesterone (OR 2.91, 95% CI 1.58–5.37) were independent predictors of impaired sperm maturation, while spironolactone was not (OR 0.54, 95% CI 0.14–2.09). Testicular volume was also a predictor (OR 0.87, 95%CI 0.83–0.91), but age was not.

Conclusions: Both cyproterone-acetate and progesterone significantly impact testicular sperm maturation, as opposed to spironolactone, which shows similar active spermatogenesis rates to individuals not receiving any anti-androgenic therapy. This observation is of clinical significance when discussing GAHT selection in the context of fertility preservation.

MP 12.3

Review of reoperation and complication rates following penile prosthesis surgery using a global claims database

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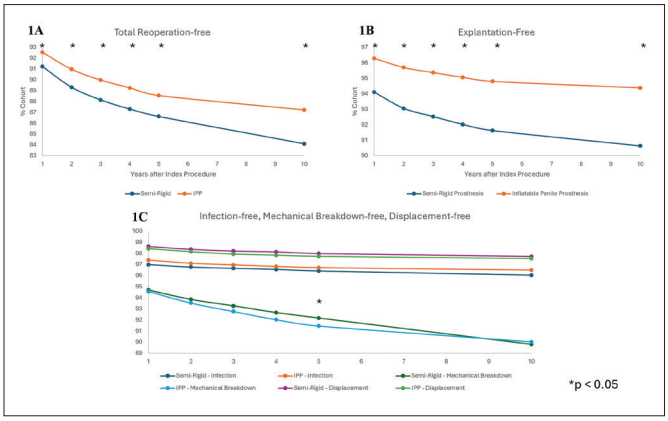
Introduction: Reoperation rates for penile prostheses are influenced by many factors. Previous studies from high-volume centers have reported 5–10-year reoperation rates of 11–16%, which may not fully represent broader, real-world outcomes. We set out to understand real-world patient outcomes using data from a large-scale, live global claims database.

Methods: We conducted an observational study using electronic health records and insurance claims from the TriNetX Dataset Network (Cambridge, MA), covering data from 2018 to October 2024. Our cohort included men aged 18 and older who received an initial inflatable or semi-rigid penile prosthesis implant and experienced prosthesis-related complications within 10 years of the procedure. Complications assessed included device revision, explantation, infection, mechanical breakdown, and displacement. Statistical comparisons of reoperation rates used two-sample Z-tests, with significance set at p<0.05.



MP 12.3. Figure 1. (A) Total reoperation-free. (B) Explantation-free. (C) Infection-free, mechanical breakdown-free, and displacement-free.

Results: The cohort included 27 874 men aged 18–90. Overall reoperation rates for semi-rigid and inflatable penile prostheses were 8.77% and 7.45% at one year, increasing to 15.89% and 12.77% at 10 years, respectively ($p<0.0001$) (Figure 1A). Explantation rates were higher for semi-rigid prostheses, with rates of 5.90% at one year and 9.37% at 10 years, compared to 3.70% and 5.62% for inflatable devices, respectively ($p<0.00001$) (Figure 1B). Mechanical breakdown rates were statistically significant at the five-year mark, with 7.83% for semi-rigid and 8.54% for inflatable devices ($p=0.047$) (Figure 1C). Infection and displacement rates showed no statistically significant differences between device types (Figure 1C).
Conclusions: This study highlights higher long-term revision rates for semi-rigid prostheses compared to inflatable ones, offering critical insights for patient counseling and device selection. The findings underscore the importance of real-world data in understanding complication rates in guiding clinical decision-making.

MP 12.4

Investigating patient outcomes through database analysis following surgical intervention for chronic orchialgia

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Introduction: Chronic scrotal pain is a complex condition with some cases linked to infections, trauma, or surgeries, but many have no clear cause. For patients unresponsive to conservative treatments, outpatient surgical interventions, such as epididymectomy, vasovasostomy (VV), and microdenervation of the spermatic cord (MDSC) offer potential relief. This study evaluated the effectiveness of these procedures using an algorithmic approach in an outpatient setting.
Methods: A prospective review was conducted on patients with chronic scrotal pain who underwent epididymectomy, VV, or MDSC at an outpatient surgical center between August 2022 and May 2024. All patients were initially managed conservatively by family physicians. For those with persistent pain, urologic evaluation determined surgical eligibility based on pain characteristics. Epididymectomy was recommended for epididymal pain, VV for post-vasectomy pain, and MDSC for generalized scrotal pain responding to cord block. Safety and efficacy were assessed at followup visits 1–2 months and 3–6 months post-surgery.
Results: A total of 112 patients underwent these procedures. In the epididymectomy group (n=64), 45 patients had complete pain relief and seven reported a 50% pain reduction. Four patients had a recurrence of pain, with three finding relief after orchiectomy or MDSC. Complications included two hematomas and two emergency visits for scrotal pain. In the VV group (n=11), seven patients achieved complete pain relief and four significantly reduced pain. No complications occurred. In the MDSC group (n=37), 23 patients had complete pain relief and six experienced substantial improvement.
Conclusions: Epididymectomy, VV, and MDSC performed in an outpatient setting offer safe and effective solutions for patients with chronic scrotal pain, demonstrating high levels of patient satisfaction and low complication rates. Using a standardized approach for patient evaluation and surgical selection enhances the likelihood of positive outcomes in managing this challenging condition.

MP 12.5

Evaluating patient tolerability and outcomes: Local anesthesia vs. nursing-administered conscious sedation vs. deep intravenous sedation in penile plication surgery

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Introduction: Peyronie's disease (PD) is a connective tissue disorder defined by penile curvature. The definitive treatment, penile plication, is traditionally performed under general anesthesia (GA). This study evaluated the effectiveness and tolerability of three anesthetic options for penile plication surgery. The aim was to identify an anesthetic approach that optimizes pain management, patient satisfaction, and accessibility.
Methods: This study prospectively evaluated the tolerability of primary penile plication in adult ambulatory patients using three anesthetic options: local anesthesia (LA) with oral sedation (methoxyflurane), nursing-administered conscious sedation (NACS) with midazolam and fentanyl, and deep intravenous sedation (DIS) with midazolam, ketamine, propofol, and remifentanil. Procedure duration and pain assessments for both patients and surgeons were noted, followed by the administration of a standardized tolerability questionnaire at 2–6 weeks postoperatively.
Results: Forty-nine patients with similar baseline characteristics were enrolled (23 DIS, 17 NACS, and 9 LA). Median curvature was 45° in the LA cohort, 55° in the DIS cohort, and 45° in the NACS cohort (Table 1). All procedures were successfully completed without conversion to GA and postoperative functional curvature (<20°) was achieved in 100% of patients. Of note, 95% of DIS, 93.3% of NACS, and 88.9% of LA patients noted they would choose the same sedation if undergoing the procedure again. There were no significant differences in perioperative or postoperative pain scores between the groups (Table 2). Similarly, complications were minimal and comparable between groups (Table 3).
Conclusions: Penile plication is well tolerated when performed using LA with oral sedation, NACS, or DIS, with no notable differences in pain or complication rates. All three anesthetic approaches are viable for outpatient penile plication, offering potential benefits such as reduced costs, minimized risks, and shorter wait times.

MP 12.6

Subclinical inflammation contributes to erectile dysfunction after prostate brachytherapy

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Introduction: Erectile dysfunction (ED) is associated with inflammation. The neutrophil-to-lymphocyte ratio (NLR) is a readily available inflammatory marker. We previously demonstrated in 842 patients that NLR ≥2 before prostate brachytherapy (PB) is a statistically significant predictive marker of post-PB ED in both univariate and multivariate analyses. Here, we present an update of our results.
Methods: All patients underwent low-dose seed PB between July 2005 and November 2024. Data from 1225 patients was available in this retrospective study of a prospectively maintained database. ED was assessed using the Common Terminology Criteria for Adverse Events (CTCAE) physician-reported scale. The endpoint was ED defined as a grade 3 function, meaning no erectile function, even with medication. The NLR was determined 1–2 months before PB and separated into PB values of <2 and ≥2. Patient characteristics and erectile function at the last followup were compared for patients using univariate (log-rank test) and multivariate analyses (Cox regression analysis) to evaluate the predictive value of baseline NLR ≥2 on post-PB ED.

MP 12.5. Table 1. Baseline and demographic variables between study groups

	LA		Anesthesiologist-administered DIS		NACS	
Age, median (IQR), y	61.90	(55.40–67.15)	59	(50.80–64.15)	58.30	(42.45–66.80)
BMI, median (IQR), kg/m²	28.29	(23.80–31.98)	25.88	(25.26–29.02)	27.32	(24.10–29.70)
No. previous general anesthesia experience (%)	7	(77.8)	18	(78)	13	(76)
No. previous conscious sedation experience (%)	1	(11.1)	13	(57)	8	(47)
No. previous inhaled methoxyflurane experience (%)	0	(0)	0	(0)	0	(0)
Charlson comorbidity index score, median (IQR)	1.0	(0–1.5)	0	(0–1.5)	0	(0–1.0)
Self-reported pain tolerance, median (IQR)[a]	3.0	(2.0–4.0)	3.50	(2–5.25)	4.0	(3.0–5.0)
Preoperative curvature, median (IQR)	45.0°	(42.5–80.0)	55.0°	(43.75–76.25)	45.0°	(45–60)
Alcohol use, median (IQR), standard drinks/wk	3.0	(0.5–4.0)	0.25	(0–4.0)	0	(0–5.5)
Cigarette smoking, median (IQR), pack-years	0	(0–0)	0	(0–0)	0	(0–0)

[a]0=extremely resilient, 10=extremely sensitive.

MP 12.5. Table 2. Procedural variables

	LA		Anesthesiologist-administered DIS		NACS	
Procedure time, median (IQR), min	58	(51.5–75)	60	(60–70)	65	(60–70)
Patient-reported pain, median (IQR)[a]						
Preoperative	0	(0–0.5)	0	(0–0)	0	(0–0)
Intraoperative	0	(0–1.5)	0	(0–0.25)	0	(0–0)
Postoperative	0	(0–7.5)	0	(0–1)	0	(0–0)
2-hr postoperative pain score, median (IQR)	3	(1.5–4)	2.5	(0–5)	3.0	(1.5–3.0)

[a]0=extremely resilient, 10=extremely sensitive. No statistically significant differences were found between groups.

MP 12.5. Table 3. Postoperative complications in study cohorts

	LA		Anesthesiologist-administered DIS		NACS	
No. headache (%)	0	(0)	0	(0)	0	(0)
No. nausea/vomiting (%)	0	(0)	0	(0)	0	(0)
No. excess pain (%)	3	(33.3)	3	(14.3)	0	(0)
No. infection (%)	1	(11.1)	1	(4.8)	0	(0)
No. hematoma (%)	0	(0)	4	(19)	5	(33.3)
No. emergency room visits (%)	1	(11.1)	0	(0)	0	(0)
No. family medicine appointments (%)	1	(11.1)	0	(0)	0	(0)

[a]0=extremely resilient, 10=extremely sensitive. No statistically significant differences were found between groups (all p>0.05, Fisher's exact test).

Results: The median followup period was 44 months (IQR 22–68). The median age of the patients was 65 years (IQR 60–69). At the last followup, 353 patients (29%) had CTCAE grade 3. On univariate analysis, the following factors were predictive of ED, all with p<0.001: NLR (≥2.0 vs. <2.0), diabetes, arterial hypertension, CAPRA score (0–2 vs. >2), age (<59 vs. 60-69 vs. ≥70), and pre-PB sexual function (0–1 vs. 2–3). Cardiovascular disease (p=0.042) and statin use (p=0.005) were also included in the multivariate analysis. On multivariate analysis, NLR ≥2 (HR 1.61, 95% CI 1.20–2.15, p=0.001) remained significant, as well as diabetes (HR 1.8, p<0.001), hypertension (HR 1.3, p=0.049), age (HR 2.2, p<0.001), and CAPRA-score (HR 1.4, p=0.008). The median time to ED was 94 (IQR 54–131) months for patients with a NLR ≥2 and 124 (IQR 72–na) months for those with a NLR <2.0. NLR was especially important in patients 60–69 years old. The difference in the age groups was 31 months.

Conclusions: We found that NLR ≥2 as a marker for subclinical inflammation before PB was an independent significant predictor of ED and could help counsel patients before treatment.

MP 12.7

Real-world utility of ChatGPT in pre-vasectomy counseling in an office-based setting: A pilot study

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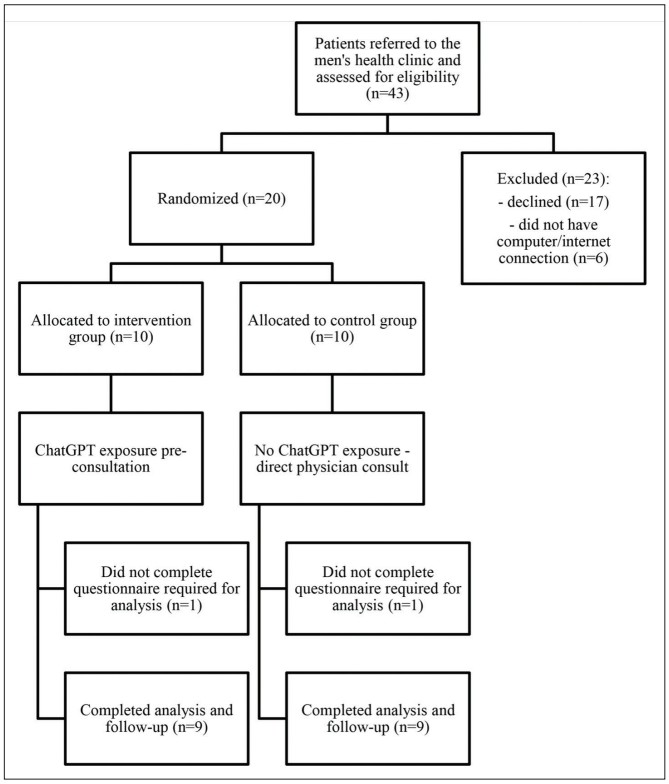
Introduction: ChatGPT (Chat Generative Pre-Trained Transformer) is an artificial intelligence (AI) language learning model based on a natural language processing tool developed by OpenAI (California, U.S.). This tool serves as a chatbot capable of recognizing, summarizing, translating, predicting, and creating text and other forms of information by using a large dataset.[1] The medical community has been increasing interest in developing new ways to harness this technology to aid medical professionals. New applications have included the drafting of scientific manuscripts and correspondents, as well as testing its performance on standardized medical licensing examinations. Despite ChatGPT demonstrating good medical knowledge, it is yet to be determined if this translates to real-world clinical practice.[2] Alongside the development of this new technology, physician burnout has become an increasing concern. As per the recent Canadian Urological Association (CUA) census, burnout was identified in 39% of urologists, with a high volume of patient visits cited as a leading predictor of burnout. This raises the question, can ChatGPT be used for patient counseling?[3] ChatGPT has demonstrated effective and safe responses to medical questions; however, its ability to counsel patients in real time has yet to be studied. Given the minimal harm involved, the high volume at which they are done, and more standardized associated counseling process, vasectomies posed as an excellent candidate to investigate the use of ChatGPT in



MP 12.7. Figure 1. Study flowchart.

MP 12.7. Table 1. Likert survey of patient-reported experiences between the ChatGPT group and control group for pre-vasectomy counseling

Patient-reported outcomes of quality of clinical encounter			
	ChatGPT group (n = 9)	Control group (n = 9)	p-value
"How would you rate the quality of the encounter?", 1–10 ± SD	9.3 ± 1.3	8.7 ± 2.1	0.426
"My visit today was on-time and efficient", 1–10 ± SD	9.4 ± 1.0	8.1 ± 2.1	0.104
"How would you rate your knowledge of the procedure?", 1–10 ± SD	9.2 ± 1.4	9.1 ± 1.2	0.857
"How would you rate your overall satisfaction with the appointment today?", 1–10 ± SD	9.3 ± 1.1	9.0 ± 1.1	0.536

patient counseling, with no previous study describing the use of a chatbot within pre-vasectomy counseling. We hypothesized that pre-vasectomy counseling with ChatGPT can safely streamline the consultation process by reducing visit times and improving the patient experience.[3,4] Doing so may facilitate pre-vasectomy counseling that is safe and comprehensive by improving physician efficiency, as well as patient understanding and satisfaction that is free of cost or burden.

MP 12.7. Table 2. Qualitative survey of patient-reported experiences with ChatGPT for pre-vasectomy counseling

"How would you rate the quality of the information provided by ChatGPT", 1–10 ± SD	8.3 ± 1.9
"How would you rate the ease of access to medical information?", 1–10 ± SD	9.1 ± 1.5
"How was your experience interacting with ChatGPT?", 1–10 ± SD	8.6 ± 1.7
"Are you concerned regarding the confidentiality of your information?", 1–10 ± SD	4.0 ± 2.9
"How comfortable would you be to undergo vasectomy without the in-person consultation?", 1–10 ± SD	7.4 ± 2.4

Methods: A single-institution, randomized, pilot study was conducted to evaluate the safety and efficacy of ChatGPT for pre-vasectomy counseling. All adult patients interested in undergoing a vasectomy were included. Unwillingness to provide consent or not having internet access constituted exclusion. Patients were randomized 1:1 to ChatGPT with standard in-person or in-person consultation without ChatGPT (Figure 1). Length of visit, number of questions asked, and a Likert scale questionnaire (on a scale of 0–10, with 10 being defined as great and 0 being defined as poor), were collected. Descriptive statistics and a comparative analysis were performed.

Results: Eighteen patients were included with a mean age of 35.8±5.4 in the intervention arm (n=9) and 36.9±7.4 in the control arm (n=9). Pre-vasectomy counseling with ChatGPT was associated with a higher provider perception of patient understanding of the procedure (8.8±1.0 vs. 6.7±2.8, p=0.047) and a decreased length of in-person consultation (7.7±2.3 vs. 10.6±3.4 minutes, p=0.05). Quality of information provided by ChatGPT, ease of use, and overall experience were rated highly at 8.3±1.9, 9.1±1.5, and 8.6±1.7, respectively (Tables 1, 2).

Conclusions: ChatGPT for pre-vasectomy counseling improved the efficiency of consultations and the provider's perception of the patient's understanding of the procedure.

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References:

1. Garg RK, Urs VL, Agarwal AA, et al. Exploring the role of ChatGPT in patient care (diagnosis and treatment) and medical research: A systematic review. *Health Promot Perspect* 2023;13:183-91. https://doi.org/10.34172/hpp.2023.22
2. Gabrielson AT, Odisho AY, Canes D. Harnessing generative artificial intelligence to improve efficiency among urologists: Welcome ChatGPT. *J Urol* 2023;209:827-9. https://doi.org/10.1097/JU.0000000000003383
3. Lee P, Bubeck S, Petro J. Benefits, limits, and risks of GPT-4 as an AI chatbot for medicine. *N Engl J Med* 2023;388:1233-9. https://doi.org/10.1056/NEJMsr2214184
4. Momenaei B, et al. ChatGPT enters the room: What it means for patient counseling, physician education, academics, and disease management. *Curr Opin Ophthalmol* 2024;35:205-9. https://doi.org/10.1097/ICU.0000000000001036

MP 12.8

Practice patterns of Canadian penile prosthesis implanters

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Introduction: Penile prosthesis insertion is widely used to treat end-stage erectile dysfunction. There are significant nuances to penile prosthesis insertion that are largely dependent on practitioner experience. We distributed an anonymous practice patterns questionnaire to identify differences among Canadian implanters in terms of experience and practice patterns.

Methods: A questionnaire-based, quantitative, cross-sectional study was carried out with the goal of evaluating Canadian implanters' practicing in Canada. The study population included implanters from eight provinces in Canada who perform penile prosthesis insertion (>5 cases annually). Questions pertained to surgical approach and practice patterns.

Results: A total of 17 surgeons responded to our survey (71% response rate). On average, 41.2% (n=7) of the respondents performed 10–20 implants annually, three implanters (17.6%) perform >50 implants per year, and the remainder of implanters (41.2%, n=7) performed 20–50 implants. When it came to device manufacturers, 58.8% (n=10) of respondents used both manufacturers (Boston Scientific & Coloplast), whereas 29.4% (n=5) used only Boston Scientific and 11.8% (n=2) used only Coloplast. Before surgery, 88.2% (n=15) routinely check HbA1c, with 54.5% (n=6) of implanters using a surgical cutoff of 8%. A urine culture was routinely ordered by 58.8% (n=10) of implanters prior to surgery. Regarding antibiotics, 52.9% (n=9) prescribe antibiotics before surgery (most prescribed was trimethoprim and sulfamethoxazole). The most used (58.8%, n 10) intravenous antibiotics were vancomycin and gentamicin. The majority (88.2%, n=15) used an antibiotic drip during surgery, with various cocktails being used. Postoperatively, 94.1% (n=16) of the respondents prescribed antibiotics. Intraoperatively, we found that most respondents (76.5%, n=13) primarily used a penoscrotal approach, with 82.4% (n=14) placing a catheter during surgery. Additionally, 88.2% (n=14) of surgeons indicated that they change gloves during the procedure, and 47.1% (n=8) do not place a drain.

Conclusions: We found significant variability among prosthetic surgeons across Canada. While the ideal penile prosthesis approach, as well as other factors, such as HbA1c cutoffs, antibiotic regimens, and intraoperative techniques, are still unknown, there is a need for high-quality data to allow for standardization of surgical approaches.

MP 12.9

Quality analysis of information on YouTube on Peyronie's disease

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Introduction: Individuals seek health information online through platforms such as YouTube to improve their health literacy and assist in medical decision-making. This study aimed to evaluate the quality of information available on YouTube on Peyronie's disease.

Methods: A YouTube search was conducted using the search terms "Peyronie's disease." The first 100 search results were screened and reviewed against inclusion and exclusion criteria, with 89 videos included in the quality analysis. Two authors independently reviewed the quality of information in the included videos against the modified DISCERN and Global Quality Scales (GQS).

Results: The most common sponsor was health channels (57%) and the most productive country was the U.S. (66.3%). The mean modified DISCERN score was 2.6, and the mean total Global Quality Scale (GQS) score was 2.8. Kruskal Wallis test identified a significant difference in the modified DISCERN score between sponsors (p=0.0006). These differences favored universities over health channels (27.0, p=0.0273) and universities over industry-sponsored videos (54.0, p=0.0002) on post-hoc analysis. No significant difference between sponsors was identified in total GQS scores. Webpage rank did not influence either quality assessment measure.

Conclusions: The overall reliability and usefulness of YouTube videos on Peyronie's disease is poor to moderate in quality. While YouTube can be a useful resource for patients seeking information on Peyronie's disease, the importance of formal consultation with a medical practitioner cannot be overstated.

MP 12.10

Arterial vascular interventions for treatment-refractory erectile dysfunction: A meta-analysis of clinical studies

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Introduction: Erectile dysfunction (ED) is a prevalent condition with complex pathophysiology, occasionally requiring surgical or minimally invasive interventions when conventional therapies fail. Arterial vascular interventions, including angioplasty and stenting of the pelvic vasculature, have emerged as potential treatments for refractory ED secondary to arterial insufficiency. This systematic review and meta-analysis aimed to evaluate the clinical outcomes and safety profile of these interventions.

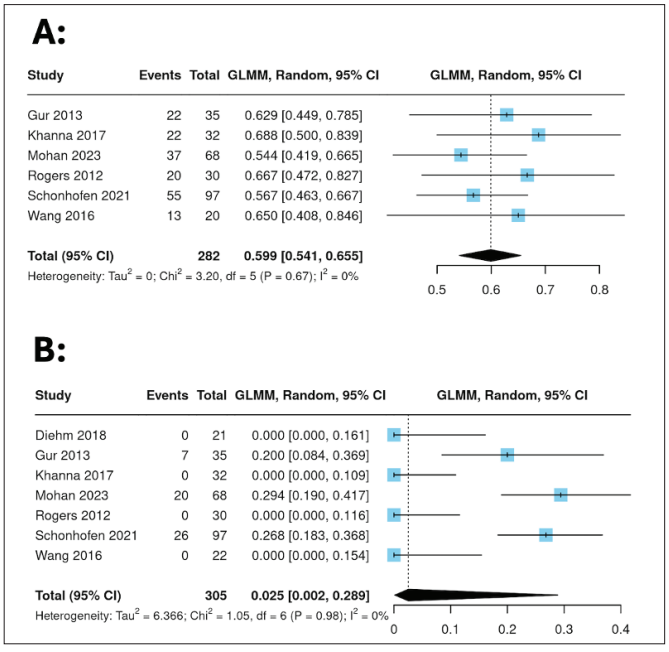
Methods: A systematic literature search was performed in December 2024 (PROSPERO registration: CRD42024625594). Primary studies with cohorts ≥5 patients undergoing arterial vascular interventions for ED were included based on predefined eligibility criteria. Outcomes assessed included type of intervention, technical and clinical success rates, complication rates, and length of followup. Weighted pooled event rates were generated with the addition of funnel plot and subgroup sensitivity analyses.

Results: Seven studies comprising 305 patients met inclusion criteria (Table 1). The pooled clinical success rate was 61% (95% CIs 56–66%), with no studies identified as outliers in sensitivity analysis (Figure 1). Funnel plot analysis suggested a publication bias favoring positive outcomes; however, this finding may be unreliable due to small-study effects. The overall complication rate was 2.5% (95% CI 0.2–29%), although the true rate remains unclear given the wide confidence interval (Figure 1). No significant outliers or skewing of data were observed in a sensitivity analysis for complications.

Conclusions: Arterial vascular interventions for treatment-refractory ED demonstrate a moderate clinical success rate with only few reported complications. The findings are limited by small sample sizes, heterogeneity in clinical success definitions, and potential publication biases. Further high-quality studies are necessary to better define the efficacy and safety of these interventions for this patient population.

MP 12.10. Table 1. Summary of included studies, including interventions, technical and clinical success rates, complications and followup

Author	Year	# of patients	Mean Age	Intervention	Treated Vessel	Technical Success Rate	Complications	Clinical Success Criteria	Clinical Success Rate	Follow-up Interval	Treatment Durability
Mohan	2023	68	63.5	DES (sirolimus) in 88.4% of lesions	Distal pudendal artery and common penile artery in 68%	99%	28% puncture site hematoma, n=1 arteriovenous fistula	>4-point change in IIEF-6 score at 3 mo	54%	3 months and 12 months	NA
Schonhofen	2021	97	61.8	DES (sirolimus) in 94.2% and POBA in remainder	Distal pudendal artery (72%)	100%	26.7% puncture site hematoma	>4-point change in IIEF-6 score at 3 mo	56.7%	3 months and 12 months	12 months 56.7% (55/97)
Diehm	2018	21	58.3	DES+DCB	Internal pudendal + penile artery	100%	None	IIEF-15 at baseline, 3 mo, and 12 mo	NA	3 months	NA
Khanna	2017	32	58.2	DES or DCB	Internal pudendal artery	100%	None	>4-point change in IIEF-6 score at 3 mo	68.75%	3 months	6 months 24/32 (75%); 12 months 25/32 (78%)
Wang	2016	22	61	POBA	Penile artery	86.4%	None	≥4-point change in IIEF-5 from baseline to 3 mo	63.64%	3 months	6 mo 13/22 (59%); 12 mo 11/22 (50%)
Gur	2013	35	57	Bare metal stent	Common iliac artery	100%	7/36 (19.44%)	Improvement in SHIM score to complete, satisfactory, or moderate	61.54%	1-6 months	NA
Rogers	2012	30	60.1	DES	Internal pudendal artery	100%	None	≥4-point change in IIEF-5 from baseline to 3 mo	68.18%	3 months	6 mo 16/23 (69.6%)



MP 12.10. Figure 1. Forest plots for pooled estimates of event rate for (A) overall success; and (B) complication rate.

MP 12.11

Literature review of randomized control trials on FSH efficacy in male idiopathic infertility

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Introduction: Idiopathic male factor infertility constitutes 30% of all infertility cases. Historically, exogenous FSH has been employed to stimulate spermatogenesis in cases of hypogonadotropic hypogonadism and has recently been extended to couples experiencing idiopathic male infertility (IMI). Existing meta-analyses on the application of FSH in IMI encompass both randomized and non-randomized trials. Our primary goal was to evaluate the effectiveness of FSH treatments in IMI, concentrating exclusively on data derived from randomized controlled trials.

Methods: A literature review of clinical studies was performed by searching PubMed with the keywords: 'FSH therapy', 'idiopathic male infertility', and 'clinical trials'. The resulting list was then manually curated to include only randomized clinical trials of FSH treatments.

Results: Upon reviewing the literature, seven randomized clinical trials of FSH treatment for IMI were identified, including six studies using recombinant FSH and one using urinary-derived FSH. Most studies employed either a three-month or four-month regimen, administered every other day or three times a week. The results indicated that FSH therapy significantly increased sperm count at doses of at least 100 IU, with improvements beginning from the third month in 4/7 studies. Morphology and forward motility showed significant enhancement starting from the fifth month in 1/3 of studies that monitored forward motility. In one study, administering 300 IU FSH notably improved both spontaneous and assisted reproductive technology pregnancy rates compared to the placebo group. Additionally, in one study, administering 100 IU FSH notably improved spontaneous pregnancy rates compared to the placebo group. In another study, FSH improved fertilization rates after failed IVF attempts (Table 1).

Conclusions: The results suggest that higher doses of FSH may effectively increase sperm concentration, irrespective of the FSH source; however, these treatments do not consistently translate into improved pregnancy rates. Future studies could benefit from further stratifying patients to identify the specific populations that may derive the most benefit from this therapy.

MP 12.12

Spermatogenic recovery following bilateral orchidopexy in adults with undescended testicles

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Introduction: Undescended testicles (UDT) can cause male infertility, and up to 89% of adults with untreated bilateral UDT will be diagnosed with non-obstructive zoospermia (NOA). Options for these males are limited, and the majority of published data involves orchidopexy and delayed microTESE. With longer followup, we hypothesized that there could be a potential spermatogenic recovery in ejaculated specimens. We report the largest series to date of spermatogenic recovery in azoospermic and oligospermic men with bilateral UDT.

Methods: This is a case series of four adult males with bilateral UDT and NOA or severe oligozoospermia who underwent bilateral orchidopexy. Testicular ultrasound and semen analyses were done regularly after orchidopexy to monitor for potential improvement. The patients were evaluated and treated collaboratively by a male fertility urologist and a pediatric urologist.

Results: Four males with bilateral UDT were included, with followup data available for three. All patients had normal genetics and bilateral inguinal testicles. The average age at the time of orchidopexy was 20.3 years (SD 1.0). Postoperative semen analyses (SA) were done at a mean followup of 14.7 months. Both azoospermic patients had recovery of spermatogenesis, with one progressing to cryptozoospermia, and one with a concentration of 200 000 million/ml at two-years followup. The severely oligospermic patient's TMSC improved from 130 000 to 3.6 million at one-year followup. The fourth patient's SA is pending his first followup. FSH decreased postoperatively by an average of 5.1 IU/L (SD 8.51). Postoperative testicular volumes increased by an average of 1.11 cc (SD 2.19) at an average of 11.3 months' followup (Table 1).

Conclusions: We report the largest series of spermatogenic recovery after bilateral orchidopexy in adult males with UDT. This provides new options and allows a more broad conversation for men who discover cryptorchidism later in life. With long enough followup, recovery may mean these men can avoid microTESE and potentially introduce more reproductive options.

MP 12.12. Table 1. Semen analyses, US, and biochemical changes

Investigation	Case 1		Case 2			Case 3		Case 4	
	Baseline	Followup	Baseline	Followup 1	Followup 2	Baseline	Followup	Baseline	Followup
Age*	19 yrs + 5 mo	20 yrs + 8 mo	21yrs + 9 mo	22 yrs + 8 mo	23yrs + 8 mo	20 yrs + 0 mo	21 yrs + 6 mo	19 yrs + 9 mo	P
US volume (cc)	Right = 9.4	Right = 13.6	Right = 6.2	Right = 6.3	Right = 5.9	Right = 8.5	Right = 11.0	Right = 4.6	P
	Left = 10.2	Left = 16.5	Left = 5.9	Left = 4.5	Left = 4.0	Left = 3.5	Left = 7.7	Left = 5.2	P
Semen analysis	Azoospermia	Crypto	Azoospermia	Severe oligo	Severe oligo	Severe oligo	Oligo	Azoospermia	P
Volume (mL)	0.5	3	2	3	2	2	1	1	P
Count; motility	0	3 non-motile sperm post-centrifugation	0	2 motile sperm seen on wet mount	200 000; not available	1.3 million; 5%	9 million; 40%	0	P
T (nmol/L)	11.02	20.76	18.2	18.69	P	30	P	16.8	P
LH (IU/L)	Not available	4.9	18.5	11.37	P	5.9	P	Not available	P
FSH (IU/L)	6.4	5.5	62.9	48	P	7.7	P	40.6	P

*Baseline age was calculated based on date of OR. Followup age calculated based on date of post-op semen analysis. P: results currently pending.

MP 12.11. Table 1. Summary of studies meeting the search criteria

Study (year)	FSH source	Treatment duration	FSH dosage	N	Semen analysis		Pregnancy rate	
					Pre-FSH Tx	Post-FSH Tx	Unassisted	Assisted
Selice (2011)	Recombinant	3 months, TIW	**0 IU (control)**	**35**	**C=3.8 mil/mL FM=20.1% M=13.3%**	**C=4.1 mil/mL FM=21.6% M=11.9%**	**4.6 % (n=2/35)**	Not measured
			150 IU	70	C=4.0 mil/mL* FM=20.8%* M=13.7%*	C=8.6 mil/mL* FM=25.5%* M=15.9%*	14.8 % (n=10/70)	
Ding (2015)	Recombinant	3 months, QOD	**0 (control)**	30	**C=4.1 mil/mL FM=25.8%**	**C=5.0 mil/mL FM=27.1%**	**6.7 % (2/30)**	**25 % (n=7/28)**
			50 IU	36	C=4.3 mil/mL FM=25.4%	C=5.9 mil/mL FM=27.7%	8.3 % (3/36)	27% (n=9/33)
			100 IU	38	C=5.2 mil/mL FM=24.8%	C=6.9 mil/mL FM=28.7%	7.9 % (3/38)	31% (n = 11/35)
			200 IU	41	C=4.8 mil/mL* FM=24.8%*	C=14.9 mil/mL* FM=30.7%	9.7 % (4/41)	37% (n = 13/35)
			300 IU	40	C=5.1 mil/mL* FM=23.8%*	C=19.1 mil/mL* FM=29.7%	15 % (6/40)*	41% (n =14/34)*
Colacurci (2013)	Recombinant	3 months, QOD	**0 IU (control)**	64	**C=8.1 mil/mL FM=21.8% M=26.9%**	**C=7.9 mil/mL FM=22.4% M=26.8%**	Not measured	Not measured
			150 IU	65	C=7.8 mil/mL FM=20.6% M=27.5%	C=11.6 mil/mL FM=23.1% M=28.8%		
Foresta (2005)	Recombinant	3 months, QOD	**0 IU (control)**	**50**	**C= 6.8 mil/mL**	**C=7.1 mil/mL**	**4 % (n=2/50)**	**20.8 % (n=10/48)**
			100 IU	62	Responder *C=6.4 mil/mL Non-responder C=6.1 mil/mL	Responder *C=19.8 mil/mL Non-responder C=7.7 mil/mL	Responder *16.7 % (n=5/30) Non-responder 3.1 % (n=1/32)	Responder 30% (n=3/10) Non-responder 19.3 % (n=6/31)
Foresta (2002)	Recombinant	3 months, QOD	**0 IU (control)**	**15**	**4.3 mil/mL**	**5.6 mil/mL**	Not measured	Not measured
			50 IU	15	3.7 mil/mL	5.8 mil/mL		
			100 IU	15	5.1 mil/mL*	9.6 mil/mL*		
Paradisi (2006)	Recombinant	4 months, QOD	**0 IU (control)**	15	**7.4 mil/mL**	**7.5 mil/mL**	Not measured	Not measured
			300 IU	15	7.6 mil/mL	16.1 mil/mL		
Ben-Rafael (2000)	Urinary-derived	2 months, daily†	0 IU (control)	20	–	–	Not measured	5.8 %‡
			75 IU	20	–	–		19.7 %‡
			150 IU	20	–	–		20.5 %‡

*Statistically significant improvement in semen analysis or pregnancy rate was observed. The patient had undergone at least one prior IVF attempt where fertilization either failed or the fertilization rate was below 30%. Subsequently, the patient received FSH therapy before the next IVF cycle. ‡Numbers corresponding to fertilization rate.