ORIGINAL RESEARCH

Practice patterns of Canadian penile prosthesis implanters

A survey-based analysis

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ABSTRACT

INTRODUCTION: Penile prosthesis implantation is a well-established treatment for refractory erectile dysfunction; however, significant variations exist in surgical techniques and practice patterns, often influenced by individual surgeon experience and training. Our study aimed to identify these variations among Canadian implanters, assessing their approach to penile prosthesis surgery.

METHODS: A cross-sectional, questionnaire-based study was conducted to evaluate the practice patterns of Canadian surgeons performing penile prosthesis implantation. The study included implanters from all provinces who perform more than five cases annually. An anonymous electronic survey was distributed, assessing practice patterns, surgical approach, and recommendations for improving penile prosthesis surgery in Canada.

RESULTS: Seventeen Canadian urologists performing over five annual cases participated in the study, with the annual volume varying among respondents. The majority (88.2%, n=15) routinely checked HbA1c levels, with 54.5% (n=6) using a cutoff of 8%. Additionally, 58.8% (n=10) routinely ordered a urine culture, and 94.1% (n=16) performed a preoperative scrub. Just over half (52.9%, n=9) prescribed preoperative antibiotics, the majority (88.2%, n=15) used an antibiotic dip, and postoperatively, 94.1% (n=16) of respondents prescribed antibiotics. Most implanters (76.5%, n=13) primarily used a penoscrotal approach, and 47.1% (n=8) did not routinely place a drain. Respondents also indicated perceived ways to improve penile prosthesis education across Canada, focusing on patient education and surgical simulation.

CONCLUSIONS: While key aspects, such as the ideal surgical approach, HbA1c cutoffs, antibiotic regimens, and intraoperative techniques, remain debated, our findings underscore the need for further standardization. High-quality educational resources and consensus guidelines could help implanters refine their practice and improve patient outcomes.

INTRODUCTION

Erectile dysfunction (ED), defined as the inability to attain or maintain penile erection sufficient for penetrative intercourse, is a common condition affecting men over the age of 40 to varying degrees.[1] Numerous risk factors contribute to its development and are closely associated with cardiovascular disease, aging, diabetes, hypertension, dyslipidemia, and smoking — with ED now being recognized as a premature marker of cardiovascular disease.[2,3]

Current management strategies for ED follow a stepwise approach with increasing invasiveness. This typically begins with oral erectogenic agents as a first-line option, followed by second-line therapies including intra-cavernosal injections, vacuum pump devices, intraurethral alprostadil, and ultimately penile prosthesis implantation for refractory cases.[4] Penile prosthesis implantation is a well-established, definitive surgical option that is generally safe and well-tolerated. With the incidence of ED reported to be as high as 47% and the growing proportion of elderly men, the demand and prevalence of penile prosthesis surgery is expected to rise.

The surgical insertion of penile prosthetics are not without risks, as intraoperative complications and postoperative complications, such as infections, device erosion, and mechanical failure, remain the largest concerns.[5,6] Previous studies have demonstrated a correlation between surgeon experience and favorable patient outcomes.[7] Despite this, standardized practice patterns and specific association-based consensus statements regard-

ing the preoperative workup, perioperative management, and postoperative care are lacking in the guidance of the surgical insertion of a penile prosthetic.

To better understand the variations that currently exist in practice patterns within the Canadian landscape and support efforts toward standardization and optimal patient outcomes, we conducted a survey-based assessment of surgeon experience and surgical approaches, as well as preoperative, perioperative, and postoperative management strategies.

METHODS

A cross-sectional study was conducted to evaluate the practice patterns of Canadian surgeons performing penile prosthesis implantation. All eligible Canadian urologists performing penile prosthetics were identified and contacted in December 2024. This was completed by discussing with the device manufacturer to reach out to active urologists implanting the device at any academic or community center. Participants were included if they actively perform penile prosthesis insertions, defined as performing over five cases annually, and consented to participating in the study.

A self-administered, anonymous, and confidential online questionnaire was distributed via email (Appendix; available at *cuaj.ca*). The survey consisted of 44 questions and required approximately 15–20 minutes to complete. It consisted of multiple-choice and short-answer questions covering various aspects, including surgeon background, surgical techniques/approach, practice patterns, and recommendations for improving penile prosthesis implantation in Canada.

Descriptive statistics were used to summarize the collected data. Categorical variables were reported as percentages and frequencies.

RESULTS

Demographics, surgical training, and practice-related characteristics

The study included 17 Canadian implanters, all of whom were male. The majority of the respondents were from Ontario (n=4, 23.5%), with other participants distributed across Alberta (n=3, 17.6%), British Columbia (n=2, 11.8%), Manitoba (n=2, 11.8%), New Brunswick (n=2, 11.8%), Saskatchewan (n=2, 11.8%), Nova Scotia (n=1, 5.9%), and Quebec (n=1, 5.9%). Most participants practiced in an academic setting (n=12, 70.6%) and had been in practice for 5–10 years (n=6, 35.3%).

Regarding training, 94.1% (n=16) had undergone further training in prosthesis surgery, with 82.3% (n=14) completing a fellowship. On average, 41.2% (n=7) of the respondents performed 10–20 implants annually, and 47.1% (n=8) reported performing 10–20 inflatable implants per year. A significant portion (n=12, 70.6%) performed fewer than five malleable implants annually.

Regarding the type of implant used, 58.8% (n=10) used both Boston and Coloplast implants, with various considerations guiding their choice (Figure 1). Notably, 35.3% (n=6) of respondents reported that their institution has an upper limit on annual penile prosthetic volume. Among those institutions with a limitation, the exact limit varied, with some reporting an annual cap of 20, 30, 70, or unknown/variable (Table 1).

Infection control measures

Slightly more than half (n=9, 52.9%) of the respondents prescribed antibiotics before surgery, with trimethoprim/sulfamethoxazole being the most commonly prescribed (Table 2). Intraoperatively, 58.8% (n=10) administered vancomycin and 52.9% used gentamicin. The majority (n=15, 88.2%) used an antibiotic dip during surgery, with gentamicin and vancomycin being the most frequently used agents. Postoperatively, 94.1% (n=16) of the respondents prescribed antibiotics.

Preoperative care

Preoperative scrubs were performed by 94.1% (n=16) of the participants, and 88.2% (n=15) routinely checked patient HbA1c levels, with 85.7% having a cutoff, most commonly at 8.0% (54.5%). Additionally, 58.8% obtained a urine culture before surgery, while 23.5% performed a duplex ultrasound. All the practitioners showed patients the device in the office before the procedure (Table 3).

Surgical approach and techniques

Most respondents (n=13, 76.5%) primarily used a penoscrotal approach (Figure 2), with 82.4% (n=14)

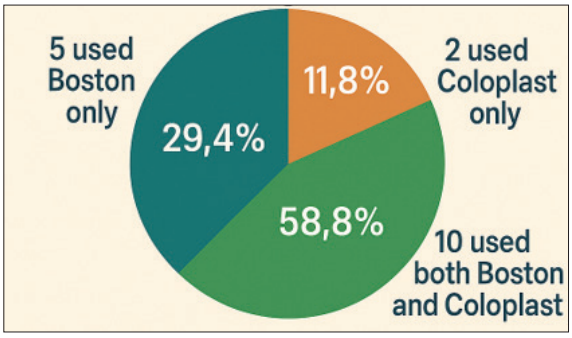

Figure 1. Prosthetic company preferences for inflatable penile insertion comparing Boston and Coloplast.

Table 1. Demographic and practice-related characteristics and surgical experience

Characteristic	Missing	Description
Gender	0 (0%)	
Male		17 (100.0%)
Female		0 (0.0%)
Province	0 (0%)	
AB		3 (17.6%)
BC		2 (11.8%)
MB		2 (11.8%)
NB		2 (11.8%)
NS		1 (5.9%)
ON		4 (23.5%)
PQ		1 (5.9%)
SK		2 (11.8%)
Primary academic or community practice	0 (0%)	
Academic		12 (70.6%)
Community		5 (29.4%)
Years in practice	0 (0%)	
1–5		5 (29.4%)
5–10		6 (35.3%)
10–15		2 (11.8%)
>15		4 (23.5%)
Did you do further training in prosthesis surgery?	1 (5.9%)	16 (94.1%)
If received training, please provide more details about the training		
Fellowship		14 (87.5%)
Prosthetics workshop		3 (18.8%)
Ultrasound courses		1 (6.3%)
Workshops		2 (12.5%)
Prosthetic mentorship observation		1 (6.3%)
Reconstruction		1 (6.3%)

BSC: Boston Scientific.

routinely placing a Foley catheter during surgery. Among those who perform a penoscrotal approach, 23.1% (n=3) reported making a counter incision for the reservoir. For surgeons who perform both infrapubic and penoscrotal approaches, 65% expressed a preference for the penoscrotal approach in specific

Table 1 (cont'd). Demographic and practice-related characteristics and surgical experience

Characteristic	Missing	Description
Average implants done annually	0 (0%)	
10–20		7 (41.2%)
20–30		2 (11.8%)
30–40		3 (17.6%)
40–50		2 (11.8%)
>50		3 (17.6%)
Average inflatable per year	0 (0%)	
10–20		8 (47.1%)
20–30		3 (17.6%)
30–40		3 (17.6%)
40–50		0 (0.0%)
>50		3 (17.6%)
Average number of malleable done annually	0 (0%)	
<5		12 (70.6%)
5–10		4 (23.5%)
20–30		1 (5.9%)
What implant do you use?	0 (0%)	
Boston only		5 (29.4%)
Coloplast only		2 (11.8%)
Both Boston and Coloplast		10 (58.8%)
If you use both products, what is your split (i.e., 40% BSC/60% Coloplast)?		
30% Boston, 70% Coloplast		1 (10.0%)
40% Boston, 60% Coloplast		1 (10.0%)
50% Boston, 50% Coloplast		1 (10.0%)
60% Boston, 40% Coloplast		2 (20.0%)
80% Boston, 20% Coloplast		1 (10.0%)
90% Boston, 10% Coloplast		4 (40.0%)
Useful where sensation may be affected aka diabetic neuropathies). If penile modeling is part of the plan, Coloplast has more data on fewer aneurysm due to manipulation vs. BSC. Some patients are drawn to the customizable dip with Coloplast (where I add lidocaine), and others prefer the incorporated abx of BSC. Often patients arrive already with a preference due to their own research.		1 (10.0%)
Otherwise alternate		1 (10.0%)

BSC: Boston Scientific.

Table 1 (cont'd). Demographic and practice-related characteristics and surgical experience

Characteristic	Missing	Description
Does your institution have a cap for prosthesis volume annually?	0 (0%)	6 (35.3%)
If yes to the above, how many?	0 (0%)	
20		1 (16.7%)
30		1 (16.7%)
70		1 (16.7%)
Moving target		1 (16.7%)
Not disclosed		1 (16.7%)
Unknown		1 (16.7%)

BSC: Boston Scientific.

scenarios. Of these, 16.7% used penoscrotal exclusively, 16.7% did not practice infrapubic at all, 16.7% preferred penoscrotal in cases of obesity, 16.7% in cases of both obesity and severe Peyronie's disease, and 33.3% in revision surgeries.

Reservoir placement varied, with the space of Retzius being the most common site (59%). For cases involving post-radical prostatectomy or cystectomy, the reservoir was most commonly placed in the submuscular space (17.6%) and retropubic or space of Retzius (11.8%) (Figures 3, 4). For bilateral inguinal hernias, surgeons most frequently used the submuscular (52.9%) approach.

For standard inflatable penile prosthesis (IPP) cases, 82.4% of surgeons reported inserting a catheter, with 41.7% leaving it in for the duration of the entire procedure. Additionally, 88.2% of surgeons indicated that they change gloves during the procedure, and 47.1% do not place a drain, while 35.3% of them do. Among those who place a drain, the most common duration was between one and five days (Table 4).

Postoperative care and patient counseling

Postoperative practices varied, with 52.9% of patients being discharged the same day as surgery, and 58.8% of devices were left partially inflated postoperatively. Followup visits were most commonly scheduled for postoperative day 42 (week 6, 35.3%). Most respondents (47.1%) advised patients to begin using the device 4–6 weeks after surgery. Counseling on post-surgerical penile length often involved setting expectations for potential shortening (52.9%) (Table 5).

Table 2. Antibiotic and infection control measures

Characteristic	Missing	Description
For your standard IPP case, do you prescribe antibiotics before surgery?	0 (0%)	9 (52.9%)
If yes to the above, what antibiotic(s)?		
Keflex		2 (25.0%)
Levaquin		1 (12.5%)
Septra		5 (62.5%)
For your standard IPP case, what intravenous antibiotics do you give intraoperatively?		
Cefazolin	0 (0%)	5 (29.4%)
Cefixen	0 (0%)	1 (5.9%)
Gentamicin	0 (0%)	9 (52.9%)
Vancomycin	0 (0%)	10 (58.8%)
Hibiclens	0 (0%)	1 (5.9%)
Kefzol	0 (0%)	1 (5.9%)
Aminoglycoside	0 (0%)	1 (5.9%)
Fluconazole	0 (0%)	1 (5.9%)
Tobramycin	0 (0%)	3 (17.6%)
For your standard IPP case, do you use an antibiotic dip?	0 (0%)	15 (88.2%)
If yes, specify the antibiotic dip		
Bacitracin		3 (20.0%)
Gentamicin		8 (53.3%)
Fluconazole		4 (26.7%)
Irrisept		3 (20.0%)
NA		2 (13.3%)
Tobramycin		1 (6.7%)
Vancomycin		7 (46.7%)
Micafungin		1 (6.7%)
lidocaine mixture		1 (6.7%)
Do you use the same dip for both a Coloplast/BSC device?	3 (18%)	9 (64.3%)
For your standard IPP case, do you give antibiotics postoperative?	0 (0%)	16 (94.1%)

BSC: Boston Scientific; IPP: inflatable penile prosthetic.

DISCUSSION

Penile implants are the definitive and gold-standard treatment for ED in patients with refractory ED and failed first- and second-line therapies. While the safety and efficacy have been well-established, the specifics regarding the preoperative, perioperative, and postop-

Table 3. Preoperative procedures

Characteristic	Missing	Description
Doing a preoperative scrub	0 (0%)	16 (94.1%)
Check HbA1c for patients	0 (0%)	15 (88.2%)
Have a HbA1c cutoff	3 (18%)	12 (85.7%)
If yes, please mention	1 (8.3%)	
7.5		1 (9.1%)
8		6 (54.5%)
8.5		1 (9.1%)
8.6		1 (9.1%)
9		2 (18.2%)
Do you get a urine culture prior to surgery?	0 (0%)	10 (58.8%)
Do you perform a duplex US prior to surgery?	0 (0%)	4 (23.5%)
Do you show patients a device in the office?	0 (0%)	17 (100.0%)

US: ultrasound.

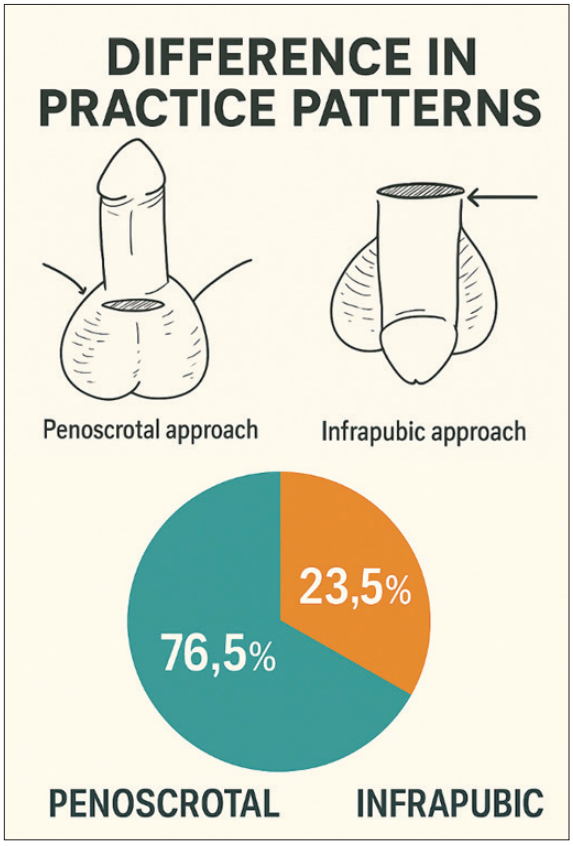

Figure 2. Difference in practice patterns for insertion approach.

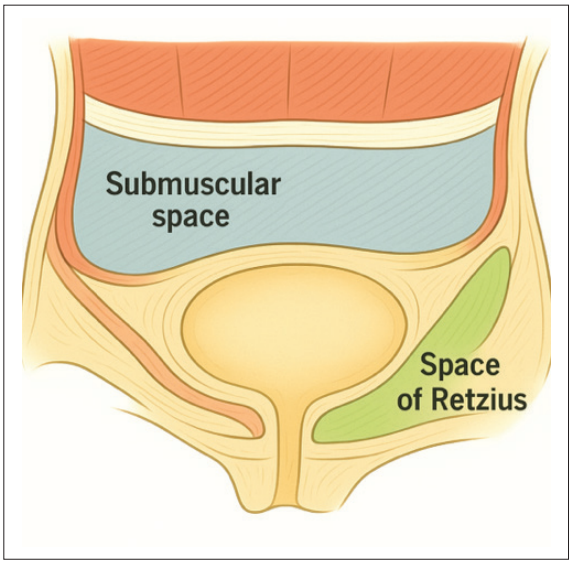

Figure 3. The two most common locations of inflatable penile prosthetic reservoir placement, the submuscular space below the abdominal rectus muscle and the left space of Retzius.

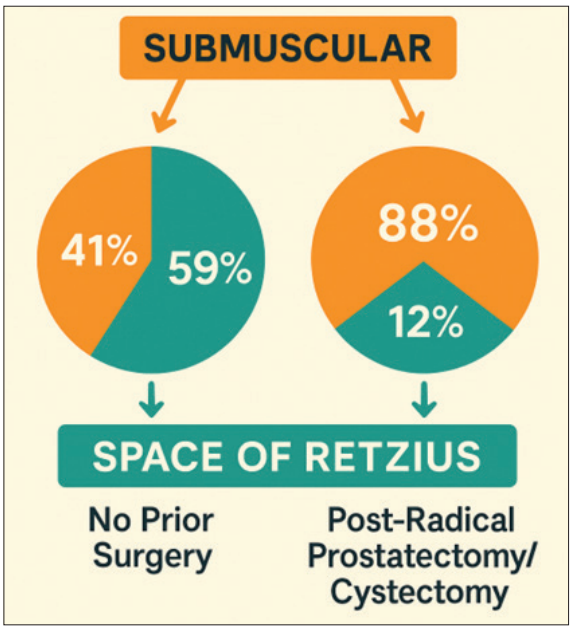

Figure 4. Inflatable penile prosthetic reservoir placement preferences.

erative management vary, and remain dependent on provider experience and training.

The group surveyed here represents a specific subset of Canadian urologists with subspecialty andrology training. Furthermore, many of those performing penile prosthetic implantation continue the practice patterns of their fellowships and thus do not necessarily reflect the whole of Canadian urological practice. All those who were surveyed and responded did state that they

Table 4. Surgical approach and techniques

Characteristic	Missing	Description
Do you primarily perform a penoscrotal or infrapubic approach?	0 (0%)	
Penoscrotal		13 (76.5%)
Infrapubic		4 (23.5%)
If you perform a penoscrotal approach - do you perform a counter incision for the reservoir?		3 (23.1%)
If you perform both infrapubic/penoscrotal, preference for penoscrotal with		
Exclusively use	11 (65%)	1 (16.7%)
No infrapubic experience	11 (65%)	1 (16.7%)
Obesity, severe Peyronie's disease	11 (65%)	2 (33.3%)
Revision surgery	11 (65%)	2 (33.3%)
For your standard IPP case, do you place a catheter during surgery?	0 (0%)	14 (82.4%)
For your standard IPP case, do you insert a catheter?	0 (0%)	14 (82.4%)
If yes, duration of catheter insertion	2 (14%)	
1 day		4 (33.3%)
2 days		1 (8.3%)
For the whole procedure		5 (41.7%)
Overnight		2 (16.7%)
Where do you place a reservoir? If no prior surgery	0 (0%)	
Submuscular		7 (41%)
Space of Retzius		10 (59%)

IPP: inflatable penile prosthetic.

Table 4 (cont'd). Surgical approach and techniques

Characteristic	Missing	Description
Inflatable penile prosthetic	0 (0%)	
Inflatable penile prosthetic		15 (88 %)
Inflatable penile prosthetic		2 (12%)
Inflatable penile prosthetic	2 (11.8%)	
Submuscular		9 (52.9%)
Midline		6 (35.3%)
Space of Retzius		0 (0%)
For your standard IPP case, do you use an ioban?	0 (0%)	7 (41.2%)
For your standard IPP case, do you change gloves during the case?	0 (0%)	15 (88.2%)
For your standard IPP case, do you place a drain?	0 (0%)	
No		8 (47.1%)
Sometimes		3 (17.6%)
Yes		6 (35.3%)
If yes, the duration	1 (17%)	
1 day		1 (20.0%)
2 days		1 (20.0%)
2–3 days		1 (20.0%)
3 days		1 (20.0%)
3–5 days		1 (20.0%)

IPP: inflatable penile prosthetic.

received further training prior to including penile prosthetic implantation in their practice. Considering their training was heterogeneous, it follows that the practice patterns observed varied.

We employed a survey-based analysis to elucidate the backgrounds of implanters' surgical training, practice patterns among Canadian urologists commonly performing penile implantation, and secondarily assess recommendations on how to improve penile prosthesis in our country.

Prior Canadian literature has surveyed all Canadian urologists performing penile prosthetic implantation. While primarily assessing access and costs associated with penile implants, the findings regarding demographics and chosen device compare well with our findings, with the largest proportion practicing in academic settings in Ontario and using Boston Scientific inflatable devices more frequently.[8] Almost all settings had no difficulty with IPP coverage for use in ED treatment; the only exception was Saskatchewan, as coverage requires a history of radical prostatectomy. Despite this, however, no explicit difficulty in moving forward with IPP implantation was noted.

Regarding preoperative workup and patient care, our study identified key variations. We found significant variation in preoperative oral antibiotic prescriptions across Canadian implanters, with 52.9% providers routinely prescribing them, and trimethoprim/sulfamethoxazole being used most commonly.

A study analyzing the practice patterns of implanters in 2012 found that two-thirds of Sexual Medicine Society of North America (SMSNA) members and

Table 5. Postoperative care and patient counseling

Characteristic	Missing	Description
For your standard IPP case, are patients discharged the same day or next day?	0 (0%)	
Same day		9 (52.9%)
Next day		8 (47.1%)
For your standard IPP case, do you leave the device partially inflated?	0 (0%)	10 (58.8%)
For your standard IPP case, when do you see the patient post-op?		
Day 1	0 (0%)	3 (17.6%)
Day 14	0 (0%)	2 (11.8%)
Day 42	0 (0%)	6 (35.3%)
Day 10	0 (0%)	1 (5.9%)
Day 28	0 (0%)	5 (29.4%)
Day 30	0 (0%)	1 (5.9%)
On drain removal	0 (0%)	2 (11.8%)
For your standard IPP case, when can someone start using the device?	0 (0%)	
1–2 weeks postop to start cycling the device, 6 weeks to use it for penetrative intercourse		1 (5.9%)
2 weeks		1 (5.9%)
3 weeks		1 (5.9%)
4–6 weeks		4 (23.5%)
4 weeks		4 (23.5%)
5–6 weeks		1 (5.9%)
6 weeks		4 (23.5%)
Cycle when comfortable		1 (5.9%)
How do you counsel patients regarding length post-surgery?	3 (17.6%)	
Expected length loss		9 (52.9%)
Stretched penile length as a surrogate for post-op expectations		5 (29.4%)

IPP: inflatable penile prosthetic.

three-quarters of International Society for Sexual Medicine (ISSM) members did not prescribe oral preoperative antibiotics.[9] Masterson et al recommended that all patients receive two days of either ciprofloxacin or trimethoprim/sulfamethoxazole.[10] Despite infection being the most devastating complication of penile implants, there remains a paucity of literature on preoperative antibiotic administration, and recommendations are derived from literature on orthopedic implants and hernia mesh repairs.[11]

A urine culture was obtained by only 58.8% of respondents as part of the preoperative workup, consistent with prior literature, which found that less than half of IPP patients had a preoperative culture when examining a single surgeon's experience;[12] however, these findings are surprising, considering both Coloplast and Boston Scientific product labels state a contraindication for placement of an IPP in active urogenital infection, and given the strong expert opinion advocating for a preoperative urine culture.[13]

Regarding HbA1C, our study found 88.2% of Canadian implanters routinely assess this as part of the preoperative patient workup, with most having a cutoff of 8%. Controversy exists in the prior literature on whether or not diabetes infers higher risk of infection. A recent, large insurance database analysis demonstrated a higher risk of infection and subsequent revision surgeries, finding every point increase of HbA1c correlating to a 29% higher risk of infection.[14-16] More recent literature led Hebert & Kohler to cite only Oxford level 2 evidence of an increased risk of infection in those with a HbA1c >8.5%.[10,13,17]

In terms of surgical technique, most respondents indicated using a penoscrotal approach, and of those who used both approaches, some tended to use a penoscrotal approach in specific situations, including a revision procedure or in obese patients. These penoscrotal and infrapubic approaches are the most commonly used, with historic approaches also including suprapubic and perineal approaches, and a subcoronal approach used for malleable implants.[18]

Between the two most used approaches for three-piece inflatable prostheses, there is no clear expert recommendation of one over the other in terms of infection risk.[13,19] The penoscrotal approach does confer a lower risk of penile sensory loss, as there is minimal risk of dorsal nerve injury; however, this risk with the infrapubic approach is generally believed to be more theoretical and has not been demonstrated robustly within the literature.[20] The penoscrotal approach generally allows for easier anchoring of the pump within the scrotum, while the infrapubic approach allows for direct visualization of reservoir insertion. The infrapubic approach has been demonstrated to allow for shorter operating times and tends to allow for quicker resumption of sexual activities.[20-22]

Under half (47.1%) of respondents in our study stated they do not use a drain postoperatively. With postoperative hematoma formation being a common complication — given the gravity-dependant nature of the scrotum — some advocate for placement of a drain to avoid a potentially higher infection risk, delayed device usage, and prolonged postoperative pain. A sur-

vey of SMSNA and ISSM members in 2012 demonstrated a majority of respondents did not routinely place a drain.[9]

Prior literature has been conflicting regarding the utility of a drain to avoid these complications, with a conclusion of Oxford level 3 evidence stating drain placement does not impact infection risk;[13,23] however, more recent data found that prolonged drainage over 72 hours for first-time IPP implantation significantly reduces the risk of both hematoma and infection.[24]

Regarding postoperative care, our study demonstrated that almost all (94.1%) of Canadian implanters routinely prescribe postoperative antibiotics. This is in keeping with a prior U.S.-based survey in which 90% of respondents prescribed postoperative antibiotics, typically for seven days,[25,26] despite the American Urological Association's best practice guidelines recommending the cessation of antibiotics within 24 hours of the operation. With the established importance of antibiotic stewardship, particularly within urology, it is paramount to balance the risks of antimicrobial overuse and the benefits of prescribing.

In large, retrospective analyses, the routine administration of postoperative antibiotics has not been demonstrated to be associated with lower risk of urologic prosthetic explants, and evidence suggests its utility in only those deemed as high risk for infection.[27,28] Regarding timing of patient discharge in uncomplicated cases, our findings demonstrate an almost even split between same-day and next-day discharge. This is in keeping with contemporary literature reporting a higher instance of same-day discharge, while maintaining safe patient outcomes.[29-31]

Our study provides unique insights into perceived suggestions for improving penile prosthesis education in the Canadian landscape. While there are reports of high patient satisfaction rates with penile prostheses, the questionnaires used have demonstrated suboptimal satisfaction, and recent literature has shown that up to 20% of patients would not undergo an implant again.[32,33] These findings may highlight a need for improved methods of patient education and preoperative counseling, as demonstrated in the responses by respondents stating a need for increased patient-specific content and expectation management. From the provider perspective, respondents commonly list increased simulation opportunities and surgical teaching in the form of mentorship and surgical videos as suggestions. This is valuable, as previous literature has determined that higher-volume surgeons are more likely to have favorable outcomes and complication rates.[34]

CONCLUSIONS

Our study is the first to assess the practice patterns of Canadian urologic surgeons performing over five annual penile implant cases. While key aspects, such as the ideal surgical approach, HbA1c cutoffs, antibiotic regimens, and intraoperative techniques, remain debated, our findings underscore the need for further standardization. High-quality educational resources, improved simulation opportunities, and consensus guidelines could help implanters refine their practice and improve patient outcomes.

COMPETING INTERESTS: Dr. Flannigan has received consulting fees, speaking honorarium, and fellowship educational grants from Boston Scientific, Coloplast, and Ferring; is co-founder, executive, and shareholder of Teumo Health Technologies inc., a digital health company for sexual medicine; and is principal investigator for a phase 1 and phase 2 clinical trial of slow-release lidocaine and an upcoming trial of intraurethral prostaglandin gel for erectile dysfunction supported sustained therapeutics. Dr. Patel has been a consultant for Boston Scientific. The remaining authors do not report any competing personal or financial interests related to this work.

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