Received: 18 March 2026 | Revised: 31 July 2026 | Accepted: 19 August 2026
DOI: 10.1111/vsu.70154

CASE REPORT

WILEY

Skeletal modifications after transpelvic urethrostomy as treatment for urethral stricture in a three-month-old cat

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Abstract

Objective: To describe the occurrence, management, and long-term outcome of bilateral lateral displacement of the ischial tuberosities following transpelvic urethrostomy (TPU) performed to treat intrapelvic urethral rupture and obstruction in a skeletally immature cat.

Animals: One 3-month-old male domestic short-haired cat.

Study design: Case report.

Methods: A young cat with intrapelvic urethral rupture secondary to repeated unsuccessful urethral catheterizations was initially managed conservatively and subsequently underwent perineal urethrostomy, which failed due to recurrent intrapelvic urethral stenosis. Transpelvic urethrostomy was then performed as a salvage procedure. Clinical follow-up included serial physical examinations, radiography, computed tomography (CT), orthopedic assessment, and owner-completed functional questionnaires over a three-year period.

Results: The cat regained voluntary urination within 12 h postoperatively and remained continent. Follow-up radiographs at 2 months revealed bilateral lateral displacement of the ischial tuberosities, with pelvic width measuring 46.2 mm at the iliac wings and 55.7 mm at the ischial tuberosities, compared with a pelvic length of 79.6 mm. At 3 years, CT measurements showed dorsal acetabular rim angles of 16.9°–18.1° and an acetabular angle of 45°. Functional assessment demonstrated minimal musculoskeletal pain (feline musculoskeletal pain index [FMPI] = 2/72) and negligible disability (average disability score [ADS] = 0.75/16), with preserved locomotor function.

Abbreviations: AA, acetabular angle; ADS, average disability score; CT, computed tomography; DARA, the dorsal acetabular rim angle; FELV, feline leukemia virus; FIV, feline immunodeficiency virus; FLUTD, feline lower urinary tract disease; FMPI, feline musculoskeletal pain index; JPS, juvenile pubic symphysiodesis; mg/kg, miligram/kilogram; mg/kg, miligram/kilogram; mm, milimitres; PPU, prepubic urethrostomy; PU, perineal urethrostomy; TPU, transpelvic urethrostomy.

Conclusion: Transpelvic urethrostomy can be a feasible and effective surgical option for managing intrapelvic urethral rupture in skeletally immature cats. Although pelvic morphological alterations may occur following caudal pelvic symphyseal release, these changes were not associated with functional impairment in this case, highlighting the potential role of TPU as a salvage procedure in selected juvenile feline patients.

1 | INTRODUCTION

Feline urethral rupture represents a potentially life-threatening urological emergency in small animal practice. The therapeutic approach has been well-documented in veterinary literature, including both conservative and surgical treatment options. Conservative approaches rely on urinary diversion, such as urethral catheterization or cystostomy tube placement, allowing second-intention urethral healing. Surgical options include primary urethral repair, urethral resection and anastomosis, and various forms of urethrostomy.[1–4]

When conservative management fails or is not feasible, several surgical approaches have been described. Perineal urethrostomy (PU), first described by Carbone in 1963, involves resection of the penile urethra and creation of a permanent stoma in the perineal region, and is the most commonly performed procedure.[3–5] Prepubic urethrostomy (PPU) has also been reported as an alternative; however, it has been associated with a relatively high rate of postoperative complications, so it is generally reserved as a salvage procedure.[6]

Recently, transpelvic urethrostomy (TPU) has emerged as a reliable surgical option for selected cases of intrapelvic urethral disease. A study by Dumartinet et al. reported outcomes in a cohort of 38 cats treated with TPU, primarily for recurrent feline lower urinary tract disease (FLUTD), with favorable owner-assessed long-term follow-up.[7] Despite these encouraging results, there is currently no consensus regarding the most appropriate surgical approach for managing intrapelvic urethral pathology in young or skeletally inmature cats, and published data addressing age-specific outcomes remain limited.[6–8]

The aim of this report was to describe surgical management, associated skeletal modifications, and long-term clinical outcome following TPU in a three-month-old cat.

2 | MATERIALS AND METHODS

A 10-week-old intact male European Shorthair cat was referred to the emergency department for dysuria, suspected to be secondary to an acute urethral rupture following multiple unsuccessful urethral catheterizations attempts, due to unknown stranguria. The patient had been rescued from the street 2 weeks prior to presentation, with no known medical condition. Therefore, the underlying cause of the dysuria that prompted the initial catheterization attempts was unknown.

On admission, rapid testing for feline leukemia virus (FELV), feline immunodeficiency virus (FIV), and feline panleukopenia (IDEXX Laboratories, Inc., Spain) were performed with negative results. Complete blood counts were also within normal reference values. Abdominal radiographs revealed a moderately distended urinary bladder, absence of radiopaque uroliths within the urinary tract, and no apparent pelvic bone abnormalities.

Under sedation, radiographs revealed an abnormal intra-abdominal location of the urethral catheter (Figure 1).

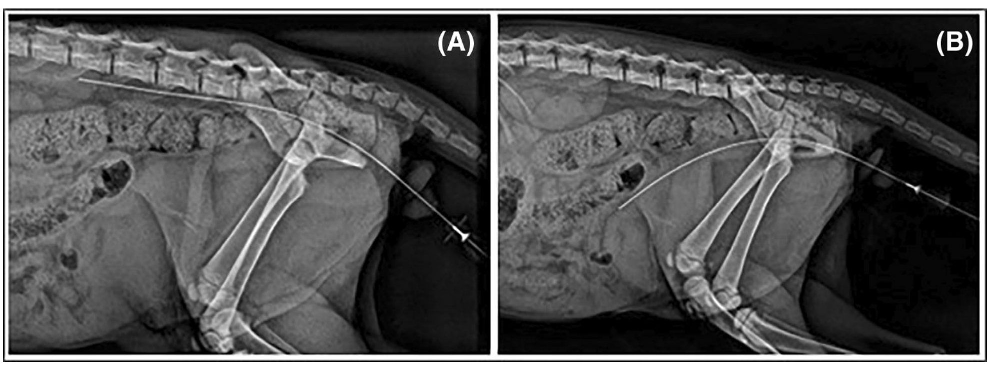

FIGURE 1 Abdominal radiography. Right lateral view. (A) Abnormal location of the urethral catheter after urethral catheterization. (B) Proper location of the urethral catheter after urethral catheterization.

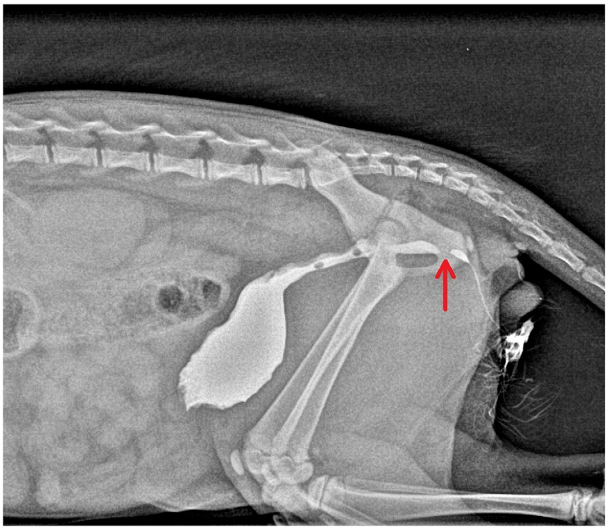

FIGURE 2 Abdominal radiography. Right lateral view. Positive-contrast retrograde urethrocystography. Red arrow shows stricture formation in the distal intrapelvic urethra.

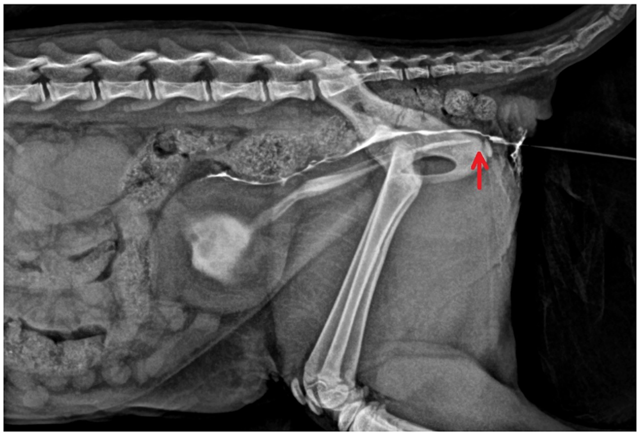

FIGURE 3 Abdominal post-procedure radiography. Right lateral view. Positive-contrast retrograde urethrocystography shows contrast leakage to the abdominal cavity after perineal urethrostomy (PU); red arrow shows stenosis in the distal intrapelvic urethra.

Urethral catheterization was successfully achieved by careful retrograde manipulation after multiple attempts. A positive-contrast retrograde urethrocystography demonstrated leakage of contrast medium into the surrounding tissues, consistent with urethral rupture. Given the difficulty encountered during catheter placement, conservative management was initially selected, which involved maintaining urethral catheterization for 7 days using a 3Fr Buster Cat Catheter (Kruuse, Langeskov, Denmark).

Following catheter removal, the patient regained urinary continence and was able to urinate independently; however, dysuria and stranguria recurred 72 h later. Repeat positive-contrast retrograde urethrocystography revealed a stricture affecting the distal intrapelvic urethra (Figure 2). A perineal urethrostomy (PU) was performed using the standard technique (Wilson Harrison).

At 48 h postoperatively, the patient developed urinary incontinence, polyuria, and hematuria. Repeated urethral catheterization under sedation and positive-contrast retrograde urethrocystography showed severe pelvic urethral stenosis and evidence of intra-abdominal contrast leakage (Figure 3). An intraurethral catheter was placed to facilitate bladder emptying, and surgical reintervention was planned.

2.1 | Surgical procedure

The patient was positioned in dorsal recumbency. A circumferential incision was made cranial to the penile remnant at the site of the previous created stoma. Subcutaneous adipose tissue was carefully dissected to expose the caudal and ventral aspects of the pubic symphysis. The gracilis and the obturator externus muscles were identified, and bilateral medial-to-lateral muscle elevation was performed to expose the ventral surface of the ischium.

Progressive ostectomy of the ischium was performed using bone rongeurs in a caudocranial direction, creating an ostectomy window measuring approximately 8 mm x 10 mm. Care was taken to avoid damage to adjacent soft tissue. The pelvic urethra was palpated using the indwelling urinary catheter as a guide. A longitudinal urethrotomy was then performed over the catheter, extending from the bulbourethral glands to a point 2–3 mm caudal to the cranial margin of the ostectomy (Figure 4).

The urethral wall was manipulated exclusively with atraumatic DeBakey forceps. The urinary catheter was subsequently removed, excess urethra transected was excised, and the urethral mucosa was sutured to the skin using a simple interrupted pattern using 4/0 absorbable monofilament sutures with an atraumatic needle (Monosyn, Braun Surgical, Rubí, Spain). At the end of the procedure the stoma was verified inserting an 5 Fr urethral catheter.

3 | RESULTS

Twelve hours after surgery, the patient was able to urinate and maintain continence without signs of dysuria. Five days postoperatively, the patient was discharged with amoxicillin-clavulanate 20 mg/kg every 12 h for 6 days, and meloxicam 0.05 mg/kg every 24 h for 3 days, as oral medication. At follow-up examination 4 days after

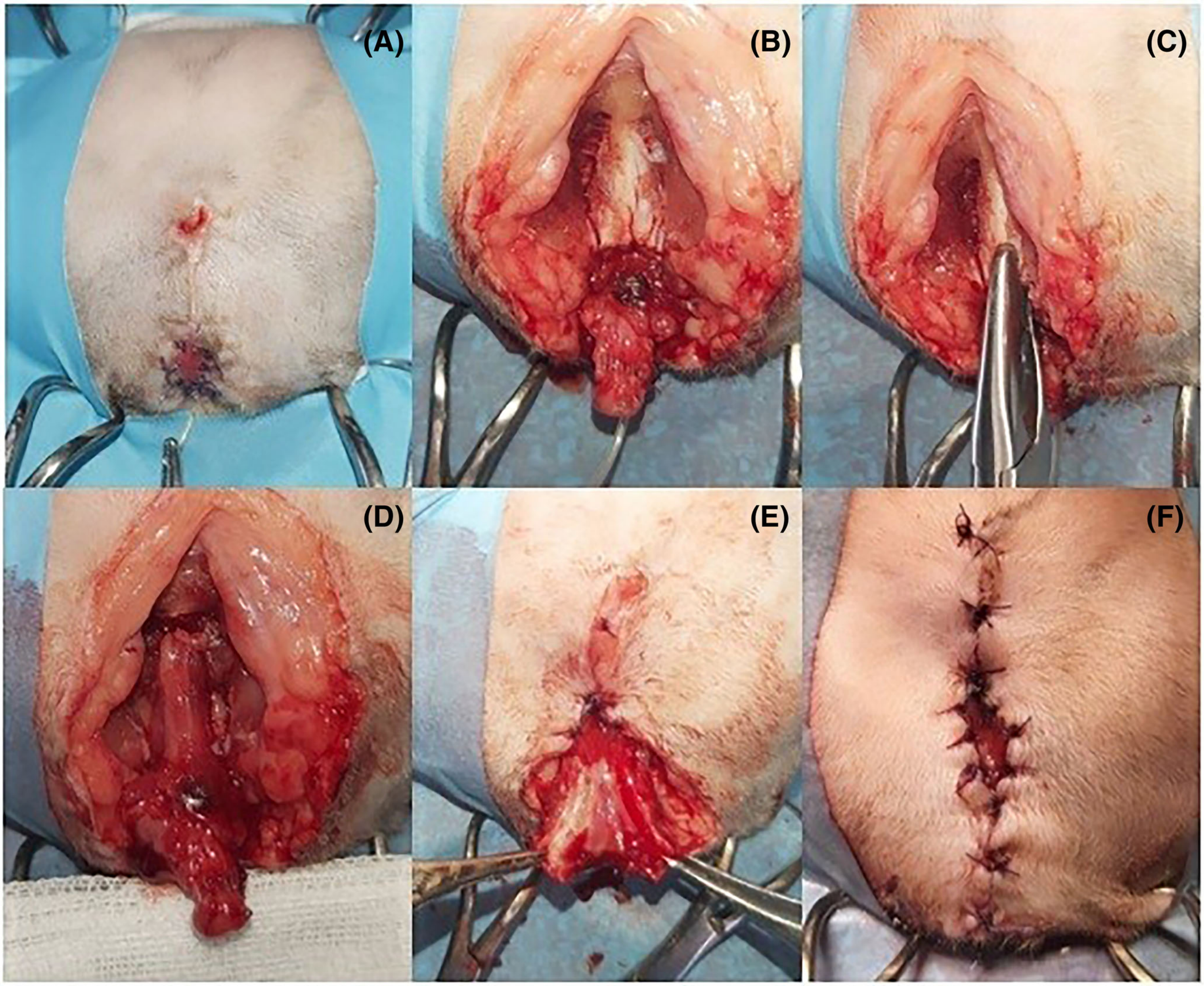

FIGURE 4 Surgical procedure. (A) Positioning in dorsal recumbency. (B) Ventral aspects of the pubic symphysis after dissection. (C) Ischium symphysis ostectomy. (D) Urethral exposure showing suspected stenotic area (dark spot). (E and F) Transection and suture of the urethral edges to the skin in a simple discontinuous pattern.

discharge, the surgical wound was healing appropriately, with no evidence of irritation, discomfort or other postoperative complications. The owners reported that the patient was walking and urinating normally.

Follow-up radiographs obtained 2 months postoperatively demonstrated bilateral lateral displacement of the ischial tuberosities, with no associated clinical signs or abnormalities on orthopedic examination. At that time, residual knots left of absorbable suture material at the stoma margins were removed. Telephone follow-up conducted 6 months postoperatively revealed no long-term complications, including signs consistent with feline lower urinary tract disease (FLUTD), urinary tract infection, dermatitis, fecal or urinary incontinence, or other procedure-related adverse effects.

Three years after the surgical intervention, follow-up radiographs and computed tomography (CT) were performed to evaluate coxofemoral joint congruence and the morphology of the caudal pelvic canal. The dorsal acetabular rim angle (DARA) and acetabular angle (AA), measured as previously described[9,10] were 18.1°–16.9° and 45°, respectively (Figure 5). Pelvic length and width were assessed following published methods.[11] Pelvic width measured 46.2 mm at the level of the ilial wings and 55.7 mm at the ischial tuberosities, while pelvic length measured 79.6 mm (Figure 6). At the 3-year follow-up, the owner reported no episodes of dysuria or stranguria and no abnormal urinary behavior (Figure 7).

This final evaluation included a complete orthopedic examination and pain assessment. Owner-completed questionnaires assessing activity level and any functional

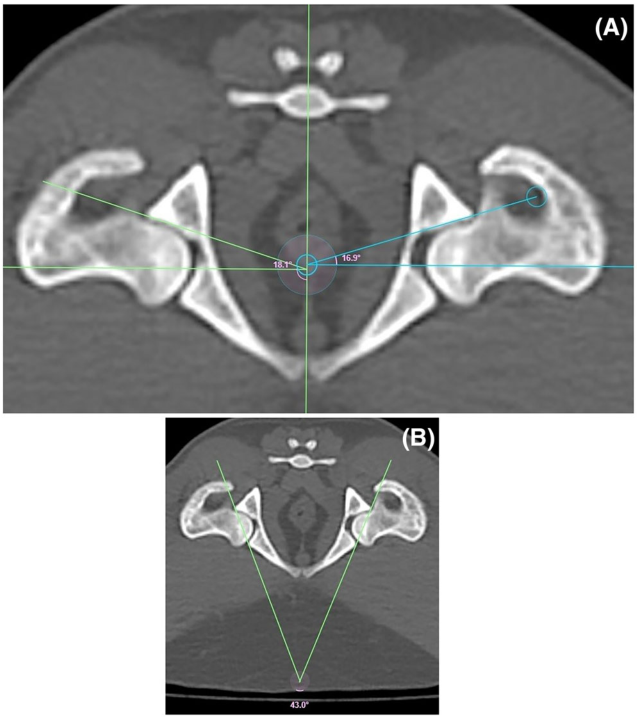

FIGURE 5 Pelvic computed tomography (CT). Transverse plane. (A) Measurement of the dorsal acetabular rim angle (DARA). A central vertical reference line was drawn. For each acetabulum, two additional lines were used to determine the DARA: A dorsal line overlying the acetabular articular surface and a ventral line drawn perpendicular to the central vertical line. The angle formed at the intersection of these two lines corresponds to the DARA (right: 18.1°, left: 16.9°). (B) Measurement of the acetabular angle (AA). Two converging lines were drawn tangential to the dorsolateral and ventrolateral acetabular margins; the angle formed at their intersection represents the AA (43°).

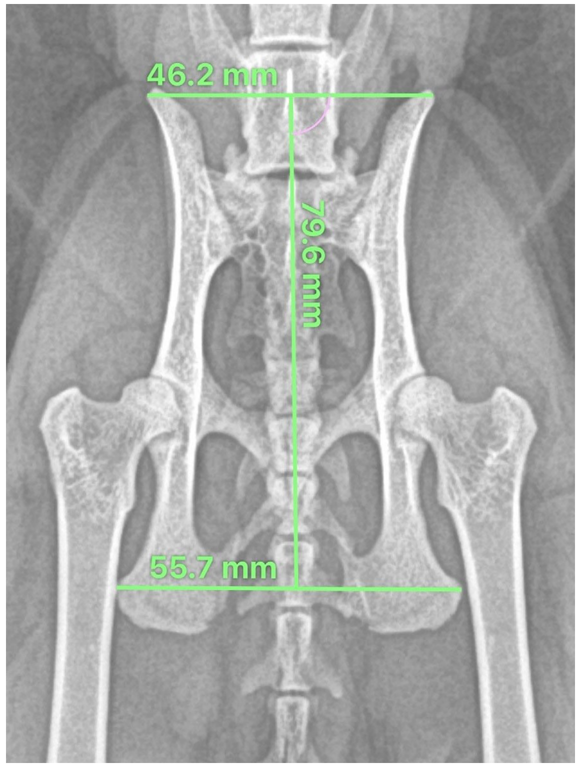

FIGURE 6 Pelvis radiography. Ventrodorsal view. The central longitudinal line shows pelvic length (79.6 mm). The upper transverse line shows the distance between iliac wings (46.2 mm). The lower transverse line shows the distance between ischial tuberosities (55.7 mm).

limitations yielded a feline musculoskeletal pain index (FMPI) score of 2 (range: 0–72) and an average disability score (ADS) of 0.75 (range: 0–16), indicating activity and mobility comparable to those of a clinically healthy cat.

4 | DISCUSSION

The cat described in this report was diagnosed with an intrapelvic urethral rupture. Urethral injuries are reported more frequently in male cats, likely due to anatomical factors.[8] The male urethra is anchored to the ischium by the ischiocavernosus and ischiourethral muscles, increasing its susceptibility to tensile and shear forces during abdominal or pelvic trauma. In addition, its relatively small diameter compared with that of females predispose male cats to urethral obstruction, often requiring catheterization, which may result in iatrogenic urethral injury.[2,8] In the present case, the history of multiple

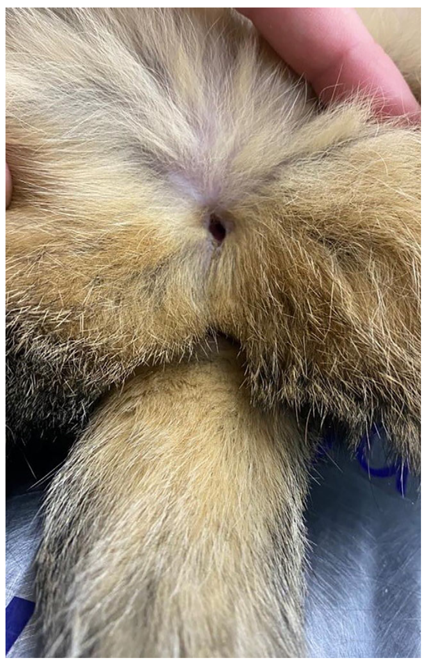

FIGURE 7 Urethral stoma completely healed 6 months after transpelvic urethrostomy.

unsuccessful urethral catheterization attempts prior to referral due to unknown stranguria, was considered the most likely cause of urethral rupture.

Positive-contrast retrograde urethrocystography was performed to definitively identify the intrapelvic urethral rupture. In accordance with published recommendations for this type of injury,[1,2] conservative management with 7-days urethral catheterization was initially chosen. The optimal duration of urethral catheterization after urethral rupture remains controversial, with recommendations ranging from 5 to ≥21 days; as prolonged catheterization may increase mechanical irritation, ascending infection, urine leakage, and stricture risk,[2,12–14] 7 days was considered a reasonable compromise between adequate urethral healing and minimizing catheter-associated morbidity. Although the patient regained bladder tone and ability to urinate after catheter removal, recurrent dysuria and urinary retention developed within 72 h. A positive-contrast retrograde urethrocystography was repeated revealing an intrapelvic urethral stricture. Antegrade balloon dilation, either alone or in combination with urethral stenting as described in previous reports,[15–19] was not feasible in this case because, even though the stenotic segment could be carefully traversed with a 3 Fr urinary catheter, no balloon dilation catheter of a sufficiently small diameter was available for a patient of this size. This limitation was likely due to the patient's young age and small urethral diameter. Consequently, a surgical approach without permanent implants was favored. Given the absence of published literature supporting TPU in a skeletally immature patient of this age (10 weeks old), a standard perineal urethrostomy was initially performed. Although this decision was based on concerns regarding the potential impact of TPU on pelvic skeletal development in such a young patient, the intrapelvic location of the urethral lesion ultimately proved to be beyond the limits of what could be adequately managed with a perineal urethrostomy. In retrospect, TPU represented the more appropriate surgical option for this lesion. The favorable long-term outcome observed in this case supports TPU as a viable treatment option in selected skeletally immature cats with intrapelvic urethral disease when less invasive alternatives are not feasible.[3,20–22]

Perineal urethrostomy may not be appropriate when intrapelvic urethral lesions prevent a tension-free anastomosis. Previous studies emphasized that surgical decision-making should be guided primarily by lesion location in order to preserve urethral length.[6,8] PPU has also been described as an alternative, although it is associated with a higher rate of postoperative complications.[6,23] Recently, TPU has emerged as a first line and salvage surgery alternative in selected cases, including recurrent FLUTD, congenital stenosis, and irreparable intrapelvic urethral injury; with long-term complication rates comparable to those reported for PU.[24] Bernarde et al. reported satisfactory outcomes in 11 adult male cats with a mean follow-up of 19 months,[25] and a more recent study including 38 cats, documented short- and long-term complication rates of 17% and 34%, respectively, with an overall owner satisfaction rate of 89%. However, the youngest cat included in that study was 5 months old, and follow up pelvic morphology was not assessed.[7] Bilateral pubic ramus fractures have been reported incidentally in one cat 6 weeks after an extended TPU performed to treat a post-prostatic intrapelvic urethral laceration.[26] According to the literature reviewed, juvenile pubic symphysiodesis (JPS) is performed by electrocauterizing the cranial two-thirds of the cartilaginous pubic symphysis while preserving the osseous pelvis to induce premature physeal closure.[9] In contrast, our procedure involved partial resection of the pubic symphysis to improve exposure of the intrapelvic urethra, with the objective of facilitating surgical access rather than modulating pelvic growth. In the present case, none of the complications most frequently reported following TPU-including stoma stricture, suture dehiscence secondary to excessive tension, or urinary tract infection- were observed. This favorable outcome further supports the feasibility of TPU in selected patients, although additional reports in skeletally immature cats are necessary to better define long-term prognostic expectations. Despite no pain or lameness was reported during follow up orthopedic examinations, due to the young age of the cat at the time when TPU was required, there were potential concerns about the impact upon skeletal development. Therefore, serial radiographs were performed.

Radiographic follow-up in the present case revealed an increase in the distance between the ischial tuberosities, suggesting that releasing the caudal pelvic symphysis may potentially influence long-term orthopedic outcomes. Miranda et al. demonstrated that pelvic dimensions in healthy cats show limited variability—regardless of whether it is assessed between the iliac wings or the ischial tuberosities— with pelvic width representing approximately 41.7% of pelvic length, independent of sex and measurement reference.[11] In contrast, the patient of this report exhibited a pelvic length that was 42% greater than the width measured at the ilium wings (79.6 mm and 46.2 mm, respectively), but only 31% greater than the width at the ischiatic tuberosities (79.6 mm and 55.7 mm), markedly differing from previously reported values. Despite these morphological changes, no pain, lameness, functional or locomotor impairments were found during the orthopedic examination or reported by the owners.

Given the radiological findings, CT scan was performed once skeletal maturity was reached to evaluate potential alterations in pelvic morphology and acetabular coverage that could predispose to orthopedic disease later in life. The DARA have been used to assess hip dysplasia in both dogs and cats.[9] Measurements of the DARA and AA were performed as previously described.[10,27,28] To the authors' knowledge, no published reference values describing these angles are currently available in healthy cats. In the present case, DARA and AA measurements (18.1°–16.9° and 45°, respectively) were comparable to those reported by Lai et al.,[9] in which pubic symphysiodesis was performed, resulting in complete resolution of clinical signs and no evidence of osteoarthritis at 6-month follow-up. (20°–20.8° and 41.5°, respectively).

Assessment of pain and function in cats remains challenging; however, the FMPI has been validated by several studies.[29–33] The low FMPI score obtained in this patient, together with a minimal ADS—originally described by Calvo et al. to evaluate forelimb function in cats following carpal arthrodesis, suggests that release of the caudal pelvic symphysis did not negatively affect pelvic conformation in this case.[34] Nevertheless, further studies are required to determine whether this finding is consistent in other skeletally immature patients undergoing TPU.

In conclusion, the findings of this clinical case demonstrate that TPU can be a feasible and effective surgical option for the management of intrapelvic urethral rupture in skeletally immature cats, including patients as young as 3 months of age. The procedure successfully restored urinary tract continuity and resulted in favorable long-term clinical outcomes, without compromising locomotor function, despite the presence of pelvic morphological alterations.

AUTHOR CONTRIBUTIONS

Hernández-León D: Acquisition of data, analysis of data and drafting of manuscript. Agüera-Espejo P: Analysis of data, drafting and revision of manuscript. Martin-Bernal C: Surgical procedure and revision of manuscript. Aranda-Jiménez F, DMV, Dipl. ECVS: Surgical procedure, revision and final approval of manuscript.

ACKNOWLEDGMENTS

We thank the diagnostic imaging department of AniCura Vetsia Veterinary Hospital for their technical support and knowledge to perform the computed tomography used in this work. We would like to clarify that the use of AI-assisted technology in the preparation of this manuscript was limited and occasional. It was used solely to assist with the translation and linguistic rephrasing of a small number of specific sentences. The tool was not used to generate scientific content, research data, analyses, results, interpretations, conclusions, or references. All modifications were carefully reviewed and verified by the authors, and the original scientific meaning and intellectual content of the manuscript remained unaltered. The authors take full responsibility for the final content of the manuscript.

CONFLICT OF INTEREST STATEMENT

The authors declare that there is no conflict of interest that could be perceived as prejudicing the impartiality of the work reported.

DATA AVAILABILITY STATEMENT

The data that support the findings of this work are available from the corresponding author upon reasonable request.

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REFERENCES

1. Corgozinho KB, de Souza HJM, Pereira AN, et al. Catheter-induced urethral trauma in cats with urethral obstruction. *J Feline Med Surg*. 2007;9(6):481-486. doi:10.1016/j.jfms.2007.09.002
2. Meige F, Sarrau S, Autefage A. Management of traumatic urethral rupture in 11 cats using primary alignment with a urethral catheter. *Vet Comp Orthop Traumatol*. 2008;21(1):76-84. doi:10.1160/vcot-07-01-0010
3. Wilson GP, Harrison JW. Perineal urethrostomy in cats. *J Am Vet Med Assoc*. 1971;159(12):1789-1793.
4. Smith CW. Perineal urethrostomy. *Vet Clin North Am Small Anim Pract*. 2002;32(4):917-925. doi:10.1016/s0195-5616(02)00032-3
5. Carbone MG. Perineal urethrostomy to relieve urethral obstruction in the male cat. *J Am Vet Med Assoc*. 1963;143:34-39.
6. Sousa-Filho RP, Nunes-Pinheiro DC, Sampaio KO, da Silva EC, Cavalcanti GA, da Cunha MGMM. Clinical outcomes of 28 cats 12–24 months after urethrostomy. *J Feline Med Surg*. 2020;22(10):890-897. doi:10.1177/1098612x19888808
7. Dumartinet C, Bernard F, Bernardé A. Outcomes and postoperative complications after transpelvic urethrostomy used as first-line surgery in 38 male cats with obstructive lower urinary tract disease. *J Feline Med Surg*. 2022;24(6):558-564. doi:10.1177/1098612x211038529
8. Addison ES, Halfacree Z, Moore AH, Demetriou J, Parsons K, Tivers M. A retrospective analysis of urethral rupture in 63 cats. *J Feline Med Surg*. 2014;16(4):300-307. doi:10.1177/1098612x13508194
9. Lai A, Culvenor J, Bailey C. Morphometric assessment of hip dysplasia in a cat treated by juvenile pubic symphysiodesis. *Vet Comp Orthop Traumatol*. 2016;29(5):433-438. doi:10.3415/vcot-15-11-0179

10. Dueland RT, Adams WM, Fialkowski JP, Patricelli AJ, Mathews KG, Nordheim EV. Effects of pubic symphysiodesis in dysplastic puppies. *Vet Surg*. 2001;30(3):201-217. doi:10.1053/jvet.2001.23350
11. Miranda FG, Souza IP, Viegas FM, et al. Radiographic study of the development of the pelvis and hip and the femorotibial joints in domestic cats. *J Feline Med Surg*. 2020;22(6):476-483. doi:10.1177/1098612x19854809
12. Boothe HW. Managing traumatic urethral injuries. *Clin Tech Small Anim Pract*. 2000;15(1):35-39. doi:10.1053/svms.2000.7889
13. Hay CW, Rosin E. Repair of an intrapelvic urethral tear in a bitch caused by iatrogenic trauma. *Vet Rec*. 1997;140(2):48-49. doi:10.1136/vr.140.2.48
14. Weaver RG, Schulte JW. Experimental and clinical studies of urethral regeneration. *Surg Gynecol Obstet*. 1962;115:729-736.
15. Alvarez JR, Smith V, Broome C. Fluoroscopy-guided balloon dilation of a proximal urethral stricture caused by a urethral membrane in a female cat. *J Feline Med Surg Open Rep*. 2019;5(2):2055116919867177. doi:10.1177/2055116919867177
16. Choi R, Lee S, Hyun C. Urethral stenting in a cat with refractory obstructive feline lower urinary tract disease. *J Vet Med Sci*. 2009;71(9):1255. doi:10.1292/jvms.71.1255
17. Dickerson VM, Grimes JA, Hill TL, Bartges JW, Schmiedt CW. Management of a urethral tear with porcine small intestinal submucosa–augmented urethroplasty and balloon dilation for subsequent urethral stricture in a cat. *J Am Vet Med Assoc*. 2021;258(2):186-191. doi:10.2460/javma.258.2.186
18. Hammond TN, King RG, Danielson KC. Successful management of pelvic urethral strictures with balloon dilation in 3 cats. *J Vet Emerg Crit Care*. 2023;33(3):371-379. doi:10.1111/vec.13288
19. Hadar EN, Morgan MJ, Morgan OD. Use of a self-expanding metallic stent for the treatment of a urethral stricture in a young cat. *J Feline Med Surg*. 2011;13(8):597-601. doi:10.1016/j.jfms.2011.03.001
20. Bass M, Howard J, Gerber B, Messmer M. Retrospective study of indications for and outcome of perineal urethrostomy in cats. *J Small Anim Pract*. 2005;46(5):227-231. doi:10.1111/j.1748-5827.2005.tb00314.x
21. Ruda L, Heiene R. Short- and long-term outcome after perineal urethrostomy in 86 cats with feline lower urinary tract disease. *J Small Anim Pract*. 2012;53(12):693-698. doi:10.1111/j.1748-5827.2012.01310.x
22. Cuddy MC, McAlinden AB. Urethra. In: Monnet TK, Johnston SA, eds. *Veterinary Surgery: Small Animal*. Vol II. MO Elsevier; 2017:6044-6094.
23. Baines SJ, Rennie S, White RSA. Prepubic urethrostomy: a long-term study in 16 cats. *Vet Surg*. 2001;30(2):107-113. doi:10.1053/jvet.2001.20327
24. Seneviratne M, Stamenova P, Lee K. Comparison of surgical indications and short- and long-term complications in 56 cats undergoing perineal, transpelvic or prepubic urethrostomy. *J Feline Med Surg*. 2021;23(6):477-486. doi:10.1177/1098612x20959032
25. Bernarde A, Viguier E. Transpelvic urethrostomy in 11 cats using an ischial ostectomy. *Vet Surg*. 2004;33(3):246-252. doi:10.1111/j.1532-950x.2004.04036.x
26. Moores AL, Agthe P, Anderson DM, Grierson JM. Pubic fractures secondary to extended transpelvic urethrostomy in a cat. *Vet Surg*. 2020;49(5):1052-1057. doi:10.1111/vsu.13407
27. Wang SI, Mathews KG, Robertson ID, Stebbins M, Trumpatori BJ. The effects of patient positioning and slice selection on canine acetabular angle assessment with computed tomography. *Vet Radiol Ultrasound*. 2005;46(1):39-43. doi:10.1111/j.1740-8261.2005.00007.x
28. Trommelmans I, Jenkins PL. Effect of double pelvic osteotomy on dorsal acetabular rim angle using computed tomography in 27 dogs. *Vet Comp Orthop Traumatol*. 2025;39:38-46. doi:10.1055/a-2648-3251
29. Gruen ME, Griffith EH, Thomson AE, Simpson W, Lascelles BDX. Criterion validation testing of clinical metrology instruments for measuring degenerative joint disease associated mobility impairment in cats. *PLoS One*. 2015;10(7):e0131839. doi:10.1371/journal.pone.0131839
30. Enomoto M, Lascelles BDX, Robertson JB, Gruen ME. Refinement of the feline musculoskeletal pain index (FMPI) and development of the short-form FMPI. *J Feline Med Surg*. 2022;24(2):142-151. doi:10.1177/1098612x211011984
31. Stadig S, Lascelles BDX, Nyman G, Bergh A. Evaluation and comparison of pain questionnaires for clinical screening of osteoarthritis in cats. *Vet Rec*. 2019;185(24):757. doi:10.1136/vr.105115
32. Benito J, Hansen B, DePuy V, et al. Feline musculoskeletal pain index: responsiveness and testing of criterion validity. *J Vet Intern Med*. 2013;27(3):474-482. doi:10.1111/jvim.12077
33. Benito J, DePuy V, Hardie E, et al. Reliability and discriminatory testing of a client-based metrology instrument, feline musculoskeletal pain index (FMPI) for the evaluation of degenerative joint disease-associated pain in cats. *Vet J*. 2013;196(3):368-373. doi:10.1016/j.tvjl.2012.12.015
34. Calvo I, Farrell M, Chase D, Aisa J, Rayward R, Carmichael S. Carpal arthrodesis in cats. *Vet Comp Orthop Traumatol*. 2009;22(6):498-504. doi:10.3415/vcot-08-08-0076

How to cite this article: Hernández-León D, Agüera-Espejo P, Martin-Bernal C, Aranda-Jiménez F. Skeletal modifications after transpelvic urethrostomy as treatment for urethral stricture in a three-month-old cat. *Veterinary Surgery*. 2026;1-8. doi:10.1111/vsu.70154