

## Letter

# A Nephrostomy Tube Forgotten for Nearly Three Decades: An Extraordinary Case of Long-Term Catheterisation Without Specialist Follow-Up

Emrah Günay<sup>1,\*</sup>, Ayşe Kösece<sup>2</sup>, Derya Başak Tanburoğlu<sup>1</sup><sup>1</sup>Department of Nephrology, Adana City Training and Research Hospital, University of Health Sciences, 01230 Adana, Turkey<sup>2</sup>Department of Cardiology, Adana City Training and Research Hospital, University of Health Sciences, 01230 Adana, Turkey\*Correspondence: [egnay01@gmail.com](mailto:egnay01@gmail.com) (Emrah Günay)

Academic Editor: Federico Nalesso

Submitted: 9 May 2026 Revised: 13 June 2026 Accepted: 15 July 2026 Published: 15 October 2026

## 1. Introduction

Obstructive uropathy is one of the most common conditions affecting the urinary system and represents a significant cause of renal insufficiency, which may progress to end-stage renal disease. Obstruction of urinary flow leads to dilatation of the pelvicalyceal system and causes damage to both the tubular apparatus and renal parenchyma [1]. Left untreated or inadequately managed, it can predispose patients to chronic kidney disease [2,3]. Obstructive uropathy is estimated to account for 5%–10% of cases of acute kidney injury and approximately 4% of cases of end-stage kidney disease [4].

In acute obstructive uropathy, emergency decompression via percutaneous nephrostomy (PCN) or retrograde ureteral stenting is required. Timely decompression can prevent renal dysfunction, inflammation and ischaemic injury from progressing to irreversible chronic kidney disease [5].

While PCN is a well-established temporising or definitive intervention, its long-term retention beyond the resolution of the underlying indication carries recognised risks, including catheter migration, infectious complications, biofilm formation and haematuria [5,6]. The present case describes an individual with a total PCN history spanning nearly three decades, including 26 years with the current catheter left uninterrupted *in situ* without any dedicated urological or nephrological follow-up. To our knowledge, this represents the longest such retention reported in the literature. Beyond its exceptional duration, the case is instructive because the patient remained in frequent contact with the healthcare system throughout this period—accumulating dozens of emergency presentations and several intensive care admissions for unrelated conditions—yet this contact never translated into nephrological or urological review. The case therefore illustrates how avoidance specific to a single organ or procedure can persist undetected within a functioning healthcare system. It underscores the need for proactive specialty-specific recall mechanisms rather than reliance on patient-initiated follow-up.

## 2. Case Report

A 61-year-old man presented to the emergency department in December 2025 with typical exertional chest pain. His medical history was notable for diabetes mellitus, hypertension, nephrolithiasis and coronary artery bypass grafting (2001).

In 1996, at 31 years of age, he underwent surgery for nephrolithiasis, after which bilateral double-J (DJ) ureteral stents were placed. Three months postoperatively, the left DJ stent migrated spontaneously, resulting in a recurrent left-sided obstruction. A left PCN catheter was subsequently inserted for urinary decompression, and the right DJ stent was removed.

The PCN catheter remained in place for approximately three years. In 1999, while swimming, it fell out spontaneously. The patient presented to the hospital, where the catheter was reinserted. The catheter currently retained is therefore the one inserted in 1999, with an indwelling duration of approximately 26 years. The overall history of continuous PCN catheterisation dates from the initial insertion in 1996, spanning approximately 30 years. He never again sought medical attention specifically for the nephrostomy catheter. Although he underwent cardiac surgery in 2001 for an unrelated indication, he did not attend any urological or renal follow-up during the subsequent 24 years. A review of institutional records identified 60 emergency department attendances between March 2011 and June 2026, and three coronary intensive care unit admissions (May 2021, December 2025 and January 2026). None of these contacts resulted in a referral to nephrology, urology or any other outpatient specialty. The first urology consultation was requested only during the second coronary intensive care unit admission, which was in December 2025. According to the patient's recollection, in the absence of medical records, daily drainage from the left PCN catheter measured approximately 200–300 mL from 1999, declining to approximately 50 mL per day over the following three years. The drainage volume then continued to decline slowly, reaching almost zero at the time of this visit.



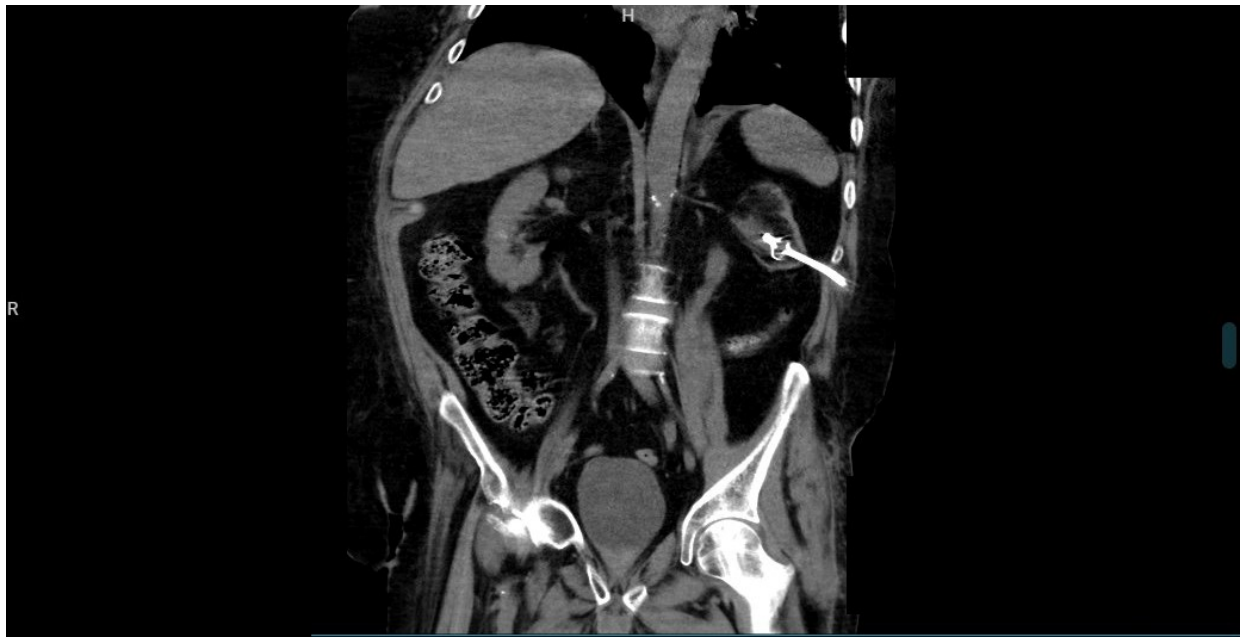


**Fig. 1. Non-contrast abdominal CT of the urinary tract.** Non-contrast abdominal computed tomography (coronal reconstruction) demonstrating a normal-sized right kidney and a markedly atrophic left kidney with the percutaneous nephrostomy catheter tip visible within the left renal pelvis.

The catheter became occluded every two to three months, and the patient resolved each episode independently by irrigating it with a self-prepared mixture of povidone-iodine and isotonic saline. Purulent discharge at the skin entry site developed every three to four months and was managed at home with rifamycin ointment and povidone-iodine dressings. Throughout this 26-year period, the patient had no medical contact specifically related to the nephrostomy.

On admission, serum creatinine was 1.0 mg/dL (normal range: 0.7–1.2 mg/dL), and the estimated glomerular filtration rate (eGFR) was 80 mL/min/1.73 m<sup>2</sup> (normal: ≥60 mL/min/1.73 m<sup>2</sup>). A review of the patient's hospital records identified four urinalysis results obtained during emergency department attendances between 2018 and 2026, all of which were negative for proteinuria, leucocyturia and haematuria. A urine culture performed in February 2026 showed no bacterial growth. No urinalysis was performed specifically during the index cardiac admission. Non-contrast abdominal computed tomography demonstrated a normal-sized right kidney without pelvicalyceal dilatation and a markedly atrophic left kidney with the PCN catheter still within the left renal pelvis (Fig. 1).

Physical examination of the left lumbar region revealed chronic skin irritation at the PCN exit site, with local erythema, hyperpigmentation and induration of the surrounding soft tissue, consistent with prolonged low-grade inflammation (Fig. 2). The patient was diagnosed with inferior myocardial infarction and admitted to the coronary intensive care unit. Coronary angiography revealed critical multivessel disease: the saphenous vein graft was

99% thrombosed, the left anterior descending artery was occluded beyond the first diagonal branch, the circumflex artery was totally occluded, and the right coronary artery was 100% occluded at the level of the conus branch. Successful percutaneous transluminal coronary angioplasty was performed on the thrombosed saphenous vein graft. Two episodes of ventricular fibrillation occurred during the procedure, each promptly terminated by defibrillation. Atrial fibrillation developed subsequently. Echocardiography demonstrated an ejection fraction of 40%, moderate-to-severe mitral regurgitation, left ventricular dilatation and regional wall motion abnormalities involving the apex, inferior and posterior walls.

Urology was consulted regarding the nephrostomy catheter. Elective removal was deferred in view of the patient's significant cardiac comorbidities and limited inpatient capacity. One month after contrast administration, serum creatinine remained stable at 1.01 mg/dL (eGFR 78 mL/min/1.73 m<sup>2</sup>). The patient was discharged with the nephrostomy catheter still in place. The patient was counselled regarding the need for elective PCN removal following cardiac stabilisation, consistent with the stepwise approach described below. However, he declined subsequent admissions and did not attend follow-up appointments. Medical therapy for heart failure and coronary artery disease was optimised.

### 3. Discussion

Long-term PCN catheterisation is rarely reported in the literature. In the present case, the patient's continuous



**Fig. 2. Percutaneous nephrostomy catheter site in the left lumbar region.** Left lumbar region of the patient showing the percutaneous nephrostomy catheter that had remained in place for approximately 26 years, with local erythema, hyperpigmentation, and induration of the surrounding soft tissue at the insertion site, consistent with chronic irritation.

dependence on an indwelling PCN catheter spanned nearly three decades, with the currently retained catheter alone in place for approximately 26 years—appearing to represent the longest such retention yet described.

Standard clinical guidelines recognise that prolonged nephrostomy catheterisation carries significant risks, including catheter migration, infectious complications (pyelonephritis and urosepsis), biofilm formation, haematuria and local tissue irritation [5,6]. The absence of systemic infectious complications over three decades in this patient is therefore remarkable. His empirical regimen of regular catheter irrigation with a povidone-iodine–isotonic saline mixture, together with local wound care

using rifamycin ointment, may have helped limit ascending infection. However, this interpretation is speculative in the absence of microbiological or longitudinal clinical data, and the role of these measures cannot be formally established. Conversely, the chronic intracavitary use of povidone-iodine may have contributed to the observed left renal atrophy. Povidone-iodine has well-documented cytotoxic properties and has been shown to cause sclerosing damage when applied repeatedly to deep tissues or body cavities [7]. It cannot be determined retrospectively whether repeated irrigation over more than two decades accelerated or compounded the parenchymal loss already initiated by obstruction. Nonetheless, this possibility deserves acknowledgement and serves as additional caution against the unsupervised use of antiseptic irrigants in indwelling catheters.

Effective renal decompression in obstructive uropathy is known to mitigate renal ischaemia, inflammation and interstitial fibrosis, thereby preserving nephron mass [2,3]. In this patient, however, progressive left renal atrophy indicates eventual functional loss of the obstructed kidney. Adequate overall renal reserve was maintained through the contralateral right kidney, which sustained a preserved GFR despite marked left renal atrophy, although it did not show frank hypertrophy on imaging. Serum creatinine alone, however, is an imperfect surrogate for the functional burden carried by a solitary kidney, particularly in the presence of longstanding diabetes mellitus and hypertension—both of which independently accelerate glomerular hyperfiltration injury. Urinalysis, including assessment for proteinuria and microalbuminuria, was not available at this admission, which is a limitation of the current report. A formal evaluation of the right kidney's long-term reserve should form part of any future outpatient assessment.

A progressively declining daily drainage volume, together with progressive ipsilateral renal atrophy, is a recognised indicator favouring elective catheter removal [2,3]. In this patient, timely intervention was precluded not by disengagement from healthcare in general but by nearly three decades without any urological or nephrological follow-up. This occurred despite multiple emergency department attendances and coronary intensive care unit admissions for unrelated indications. In Turkey, where an integrated healthcare system provides accessible primary-to-tertiary care, structural or financial barriers are unlikely to be the primary explanation. The patient's behaviour does not reflect global healthcare avoidance: institutional records document 60 emergency department attendances and three coronary intensive care unit admissions over a 15-year period, with a urology consultation requested only at the second intensive care unit (ICU) admission in December 2025. This pattern of repeated engagement with acute services while consistently avoiding nephrology and urology contact across decades is inconsistent with a simple health literacy deficit. Rather, it suggests a form of organ- or procedure-

specific avoidance, potentially rooted in iatrophobia, psychological aversion stemming from the surgeries in 1996 and 1999, or deeply held personal beliefs about catheterisation. His capacity to independently formulate an irrigation solution, recognise and manage purulent discharge and maintain catheter patency over nearly three decades further demonstrates that practical health competence was present. The case further supports the need for proactive, specialty-specific recall systems that do not depend on patients initiating contact themselves.

The question of whether the left kidney had ceased to function long before this admission is clinically relevant. Progressive atrophy, negligible drainage output and decades of obstructive history are all consistent with a non-functioning kidney. Left nephrectomy was not pursued in this case, given the patient's severe cardiac instability and refusal of further admissions. However, in a more stable patient, nephrectomy or formal radionuclide assessment of differential renal function would be the appropriate next step. Although a nephrostomy tube can theoretically maintain drainage pathways for patients with some residual renal function or at risk of recurrent infection, it should not be retained indefinitely once renal function loss is diagnosed and the initial indications for decompression have been eliminated. In the Turkish healthcare system, post-discharge monitoring of patients who decline hospital admission falls within the remit of primary care and family medicine. Direct specialist-to-patient community contact was not available in this setting. A formal referral to the patient's registered family physician was therefore made at discharge, with a request for home-based monitoring and re-referral to urology. For clinicians encountering a similar presentation, a stepwise management approach is recommended: first stabilise any acute life-threatening comorbidities and then arrange elective nephrostomy removal under appropriate anaesthetic and urological supervision once the patient is medically optimised. In this case, such an approach was followed. The patient was counselled about elective PCN removal once cardiac stabilisation was achieved, but he declined further admissions and did not return for follow-up. A clear discharge plan, including the recommendation for elective catheter removal, was documented in the medical records. This patient fortunately avoided life-threatening systemic infection, but the case serves as a reminder of a basic clinical principle: no drainage catheter should remain *in situ* beyond its clinical indication, regardless of how well the patient appears to be tolerating it. Systems-level interventions, such as active recall of patients who miss urological follow-up and improved communication between the surgical and primary care teams, may help prevent similar scenarios.

## 4. Conclusion

This case illustrates that prolonged, uninterrupted contact with acute healthcare services does not guarantee ap-

propriate specialty follow-up, allowing a single indwelling nephrostomy catheter to remain in place for nearly three decades without urological or nephrological review. Despite this, the patient avoided systemic infection through self-managed catheter care, though marked ipsilateral renal atrophy ultimately developed. This case underscores the need for proactive, specialty-specific recall systems and improved communication between acute and primary care teams to prevent similar instances of organ-specific healthcare avoidance.

## Key Points

- To our knowledge, this is the first reported case of a percutaneous nephrostomy catheter retained for nearly three decades, representing a previously undescribed duration of unintended long-term catheterisation.
- Despite the absence of medical supervision over three decades, the patient avoided systemic sepsis, likely through self-initiated catheter care; this non-standard approach is not endorsed as clinical practice and carries substantial risk of urosepsis and death.
- Marked ipsilateral renal atrophy developed despite technically functioning drainage, illustrating that long-term nephrostomy does not preserve renal parenchyma when the underlying clinical indication has resolved.
- This case highlights a critical vulnerability in follow-up systems: frequent contact with acute care does not guarantee referral to the relevant specialty, allowing risk to persist unrecognised for years.
- No drainage catheter should remain *in situ* beyond its clinical indication, and systems-level interventions such as active recall of non-attenders and improved surgical-to-primary care communication are essential to prevent similar presentations.

## Availability of Data and Materials

The datasets analysed during the current case report, including clinical, laboratory, and imaging data, are not publicly available due to patient confidentiality but are available from the corresponding author on reasonable request.

## Author Contributions

EG: Substantial contributions to the conception and design of the case report; clinical management of the patient's nephrological status; primary drafting of the manuscript. AK: Clinical management and data collection during the patient's emergency room presentation; critical revision of the manuscript for intellectual content. DBT: Acquisition and interpretation of nephrological data; literature search; drafting and formatting of the case description. All authors gave final approval of the version to be published. All authors have participated sufficiently in the work to take public responsibility for appropriate portions

of the content and agreed to be accountable for all aspects of the work in ensuring that questions related to its accuracy or integrity.

## Ethics Approval and Consent to Participate

This case report was conducted in accordance with the ethical principles of the Declaration of Helsinki. Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

## Acknowledgment

Not applicable.

## Funding

This research received no external funding.

## Conflicts of Interest

The authors declare no conflicts of interest.

## References

- [1] Tseng TY, Stoller ML. Obstructive uropathy. *Clinics in Geriatric Medicine*. 2009; 25: 437–443. <https://doi.org/10.1016/j.cger.2009.06.003>
- [2] Nørregaard R, Mutsaers HAM, Frøkiær J, Kwon TH. Obstructive nephropathy and molecular pathophysiology of renal interstitial fibrosis. *Physiological Reviews*. 2023; 103: 2827–2872. <https://doi.org/10.1152/physrev.00027.2022>
- [3] Yaxley J, Yaxley W. Obstructive uropathy - acute and chronic medical management. *World Journal of Nephrology*. 2023; 12: 1–9. <https://doi.org/10.5527/wjn.v12.i1.1>
- [4] Pérez-Aizpurua X, Cabello Benavente R, Bueno Serrano G, Alcázar Peral JM, Gómez-Jordana Mañas B, Tufet I Jaumot J, et al. Obstructive uropathy: Overview of the pathogenesis, etiology and management of a prevalent cause of acute kidney injury. *World Journal of Nephrology*. 2024; 13: 93322. <https://doi.org/10.5527/wjn.v13.i2.93322>
- [5] Pabon-Ramos WM, Dariushnia SR, Walker TG, d'Othée BJ, Ganguli S, Midia M, et al. Quality Improvement Guidelines for Percutaneous Nephrostomy. *Journal of Vascular and Interventional Radiology: JVIR*. 2016; 27: 410–414. <https://doi.org/10.1016/j.jvir.2015.11.045>
- [6] Szvalb AD, El Haddad H, Rolston KV, Sabir SH, Jiang Y, Raad II, et al. Risk factors for recurrent percutaneous nephrostomy catheter-related infections. *Infection*. 2019; 47: 239–245. <https://doi.org/10.1007/s15010-018-1245-y>
- [7] Wang D, Huang X, Lv W, Zhou J. The Toxicity and Antibacterial Effects of Povidone-Iodine Irrigation in Fracture Surgery. *Orthopaedic Surgery*. 2022; 14: 2286–2297. <https://doi.org/10.1111/os.13422>