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# Spontaneous catheter cuff extrusion

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## IMAGES IN MEDICINE

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The author has completed the ICMJE form and declares no conflicts of interest.

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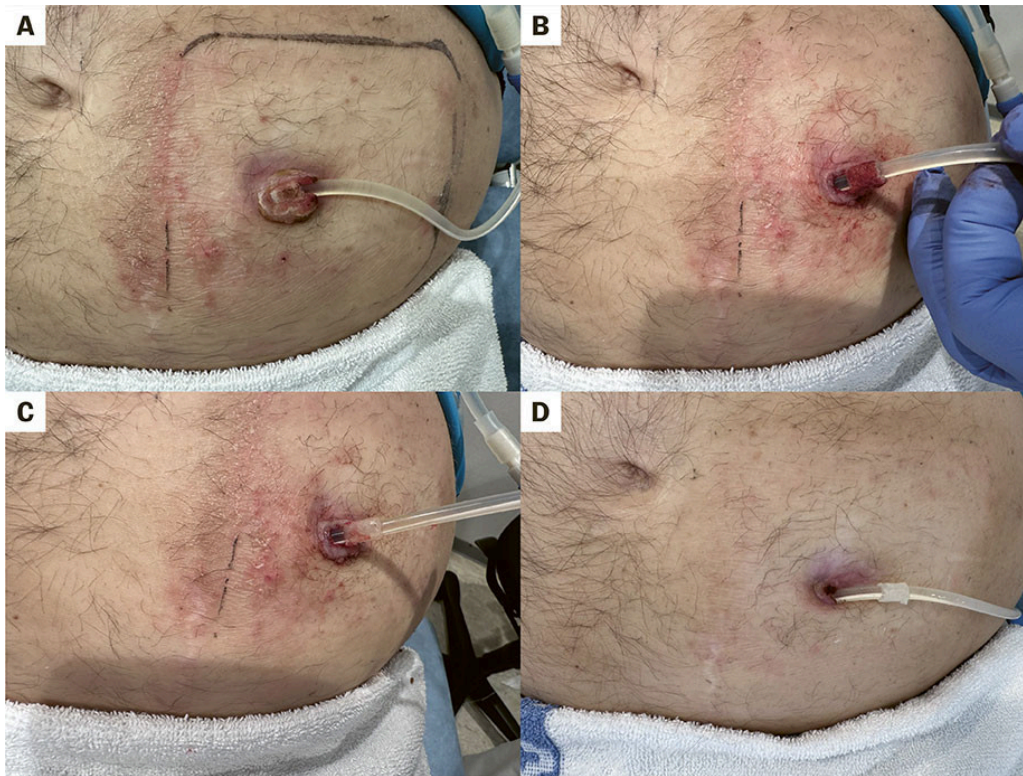
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The images show an external catheter cuff used in peritoneal dialysis that has spontaneously extruded rather than remaining within the subcutaneous tissue. In the upper left image, the skin surrounding the cuff is infected, while the upper right image shows that the external cuff has completely separated from the skin. In the lower left image, the cuff has been gently scraped and cleaned. In the lower right image, the peritoneal dialysis catheter exit site is shown with the remaining external cuff, with no signs of recurrent infection four weeks after separation/cleaning.

The images were of a man in his fifties with diabetic nephropathy who had been using a peritoneal dialysis catheter for three years. In recent months, he had experienced recurrent exit-site infections caused by *Staphylococcus aureus*. Despite appropriate antibiotic treatment, the infections persisted. Examination revealed that the external catheter cuff had almost completely extruded.

Peritoneal dialysis is a key treatment modality for patients with end-stage kidney disease. Catheter cuff extrusion is a relatively rare complication, often caused by recurrent exit-site infections or weight loss that shortens the catheter tunnel, causing gradual externalisation of the outer cuff. The incidence is unknown.

An extruded cuff can act as a bacterial reservoir, leading to recurrent infections and potential catheter failure. Management involves surgically dissecting the extruded cuff from the surrounding tissue and carefully shaving it with a scalpel blade (known as cuff shaving). This simple procedure enables preservation of the dialysis catheter while removing the source of infection. Infection resolution has been reported in up to 80 % of cases, with no complications attributable to the procedure itself [\(1\)](#).

This case illustrates the importance of regular follow-up of peritoneal dialysis patients and early intervention for catheter cuff extrusion, as recommended in clinical guidelines [\(2\)](#). The procedure shown in the images may extend the

functional lifespan of the peritoneal dialysis catheter and reduce the risk of serious complications such as tunnel infection and peritonitis (2).

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*The patient has consented to publication of the article.*

*The article has been peer-reviewed.*

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## REFERENCES

1. Debowski JA, Wærp C, Kjellevoid SA et al. Cuff extrusion in peritoneal dialysis: single-centre experience with the cuff-shaving procedure in five patients over a 4-year period. *Clin Kidney J* 2017; 10: 131–4. [PubMed]
  2. Chow KM, Li PK-T, Cho Y et al. ISPD Catheter-related Infection Recommendations: 2023 Update. *Perit Dial Int* 2023; 43: 201–19. [PubMed] [CrossRef]
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