End-stage renal failure. Tenckhoff catheter placement is well established to facilitate CAPD treatment. The most serious complications of these catheters are infectious; others are mechanical and technical, some related to insertion of the catheter.

Perforation of the urinary bladder is a very rare complication, which has been reported in only 13 cases [1–7]. Another case of the iatrogenic placement of a Tenckhoff catheter in the urinary bladder is reported, a mistake which was probably triggered by urinary retention secondary to a neurogenic bladder.

**Case**. A 55-year-old man with end-stage renal failure secondary to hypertensive nephropathy started treatment with maintenance haemodialysis 3 years ago. Five months after beginning treatment, he suffered from intracerebral haemorrhage and underwent neurosurgical treatment. After that disability with left hemiparesis remaining, the patient had difficulties with speech and occasionally symptoms of neurogenic bladder. Because of continuous problems with vascular access, the patient rejected construction of a new fistula and was switched to CAPD.

Before CAPD catheter placement, the patient was instructed to defecate and to void his bladder completely. Catheter insertion (Tenckhoff Swan-neck double-cuff pigtail-right) was performed under general anesthesia to allow placement of the catheter tip in the right pelvis by the standard blind implantation procedure. His immediate post-operative progress was normal. With an abdominal plain radiograph, the position of the catheter tip in the pelvis was demonstrated; sonography showed the tip of the catheter in the pelvis. Between instillations of the dialysate on the next day, the patient complained of abdominal discomfort and urinary urgency. With the subsequent increase in input volume of dialysate, there was a marked increase in urinary volume. Urinary analysis was positive for glucose. Cystoscopy revealed the tip of the catheter in the urinary bladder. Six weeks after removal of the catheter, a second catheter was placed through a separate left suprapubic incision. After that, CAPD was commenced successfully.

**Comment**. Complications of CAPD using the Tenckhoff catheter may be classified as infectious or mechanical [3]. Mechanical complications are mostly catheter related and include obstruction of the flow, leakage of the peritoneal fluid, ventral and inguinal hernias, catheter malposition or malfunction, and intra-abdominal organ injury [2,3]. Most mechanical complications occur during the first month after catheter placement [4]. Accidental placement of the peritoneal catheter in the urinary bladder is a very rare complication.

In our case, there were two very important factors. The first was our mistake; we expected a patient with a neurogenic bladder to empty his bladder. This could have been avoided with placement of a urinary catheter before surgery. The second was a misleading interpretation of the position of the catheter tip by radiography and sonography.

Our case shows that urinary catheterization before surgery must be performed in all cases where patient cooperation cannot be ensured.

**Conflict of interest statement**. None declared.

### Prevention of clot formation during haemodialysis using the direct thrombin inhibitor melagatran in patients with chronic uraemia

**Sir,**

We have read the editorial comment by MJ Flanigan [1] on our recent study ‘Prevention of clot formation during haemodialysis using the direct thrombin inhibitor melagatran in patients with chronic uraemia’.

We appreciate the comments, and agree with Dr Flanigan that the incriminate use of any anticoagulant also carries a risk for bleeding which can be serious. It is also true that the side-effects of post-dialysis residual anticoagulant activity may not always be appreciated by patients or health care staff.

However, we feel that the statement >90% of routine haemodialysis can be achieved without anticoagulation does not reflect the current practice in the majority of dialysis centres. Although it is well established that haemodialysis treatment can be performed without anticoagulation in selected cases with increased risk for bleeding, this procedure is often laborious and is not generally practised. The almost universal use of anticoagulation in clinical practice should reflect the need for anticoagulation in routine haemodialysis.

Heparins are cheap but have potentially serious side-effects as reviewed in our paper. We therefore feel that the search for means to achieve both safe and predictable anticoagulation for haemodialysis must continue. We have explored the use of a new drug and a novel mode of administration and the future application of these principles must, of course be, evaluated from all aspects, including the risk for bleeding in farther studies.

**Conflict of interest statement.** None declared.

### An accident with Tenckhoff catheter placement: urinary bladder perforation

**Sir,**

Continuous ambulatory peritoneal dialysis (CAPD) is the usual method of maintenance therapy for patients with end-stage renal failure. Tenckhoff catheter placement is well described in the literature.

In our case, there were two very important factors. The first was our mistake; we expected a patient with a neurogenic bladder to empty his bladder. This could have been avoided with placement of a urinary catheter before surgery. The second was a misleading interpretation of the position of the catheter tip by radiography and sonography.

Our case shows that urinary catheterization before surgery must be performed in all cases where patient cooperation cannot be ensured.

**Conflict of interest statement.** None declared.

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