Dear Sir,

We read with interest the manuscript by Wal van der G, Janssen JC, Spronk PE. Extravasation injury by norepinephrine: a case report and description of treatment options. The article was published in the *Neth J Crit Care* 2013;17:15-7.

In the case report, a patient is described with an extravasation injury due to a peripheral catheter. We recently observed a patient with an extravasation injury due to central catheter displacement. It concerned a patient with septic shock who was given a central venous catheter in the right internal jugular vein. The nurse warned us after takeover of the night shift, that the catheter appeared to be dislocated. We inspected the catheter and it seemed that only 7 cm was in the patient. We removed the catheter and placed a new central venous catheter in the left internal jugular vein. The drugs given by the central venous infusion were norepinephrine and potassium. Pictures were taken at regular intervals for follow up.

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**Figure 1.** Directly after removal of the central venous catheter. The subcutaneous neck is swollen. There is a purple discoloration on a whitened skin background. A plaster is stuck over the puncture wound

**Figure 2.** After 2 days. A large blister is seen

**Figure 3.** After 17 days. It was decided to remove the necrotic tissue
The patient suffered from severe complications after subcutaneous infusion of norepinephrine and potassium. The plastic surgeon was consulted after 8 hours. A primary liposuction would have been the advice in this case, but unfortunately it was too late for this, because the plastic surgeon was not consulted immediately after notification of extravasation.

Multilumen central venous lines are frequently used in critical care. Extravasation may cause severe tissue necrosis depending on the drugs given. Different measures can be taken to prevent subcutaneous infusion of drugs. Central venous pressure monitoring of the proximal lumen is possible to monitor continuously the intravascular central venous pressure. How reliable this measurement is compared to the advised distal pressure monitoring is unclear. Another option is to aspirate every lumen to regularly check intravascular placement. Displacement can also be assessed by inspecting catheter length.

We thought it might be instructive to demonstrate this severe complication of central venous line extravasation to your readers.

Figure 4. After 23 days. After infection of the wound after necrectomy

Figure 5. After 29 days. Also a percutaneous tracheostomy was placed