Central Vein Catheters for Hemodialysis

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Dear Sir,

We read with interest the report of Vanholder et al. [1], and think that their results were in general extremely advantageous.

We agree with the authors on the utility of central venous catheters for hemodialysis, especially in acute renal failure or in patients with chronic renal failure and troubles of the definitive angioaccess. Our experience with hemodialysis catheters, however was not as good as in the above-mentioned study and we would like to comment on it.

In a similar prospective study performed during 18 months, 170 hemodialysis central venous catheters (Med-West, Salt Lake City, Utah; EEUU) were inserted in 125 consecutive patients, with mechanical and septic complications. No related deaths were recorded. Pneumothorax represented the most frequent mechanical complications, being registered in 6 patients (3.5%), and requiring in 4 cases a pleural tube drainage. In 3 patients a profound venous thrombosis was clinically and angiographically evident, and in all 3 cases the upper affected extremity was excluded as a possible definitive angioaccess. One patient developed a severe pulmonary embolism, originating from the subclavian vein. In 13 patients the central venous catheter was removed because infection was suspected. In 10 cases bacteriemia related to the catheter was confirmed. The isolated microorganisms were *Staphylococcus aureus* (4 cases), *Staphylococcus epidermidis* (4 cases), and *Streptococcus faecalis* (2 cases). In all patients the catheter was removed immediately and empiric antibiotic therapy started. Despite these, 2 patients developed later septic complications in the form of septic arthritis, 1 case a knee arthritis secondary to *Staphylococcus aureus* and the other patient a shoulder arthritis secondary to *Streptococcus faecalis*.

We conclude that central venous catheters for hemodialysis represent a rapid and easy angioaccess in urgent circumstances, but their insertion and maintenance are not free of mechanical and septic complications, and extremely careful measures are necessary.

Reference