

CVC exit site care: setting standard for frequency and type of dressing

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Introduction

The preferred vascular access type for haemodialysis is the arteriovenous fistula followed by the arteriovenous graft. However, when these access types are not possible, a central venous catheter (CVC) is used instead.

With the increase in elderly, diabetic and debilitated patients receiving haemodialysis, CVC use as the first choice of vascular access has become more common, with the inherent and inevitable risk of mortality associated with this procedure[1-2].

Objectives

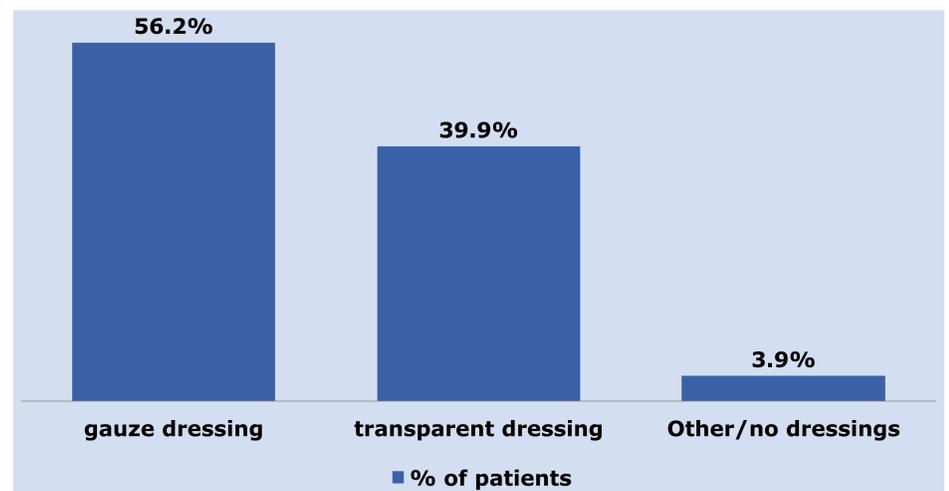
The main issue with patients with CVC is that they are more prone to catheter exit-site related infections. The aim of this investigation was to identify the best type of dressing to be used at the catheter exit site of haemodialysis patients, the frequency in which dressings should be replaced.

Methods

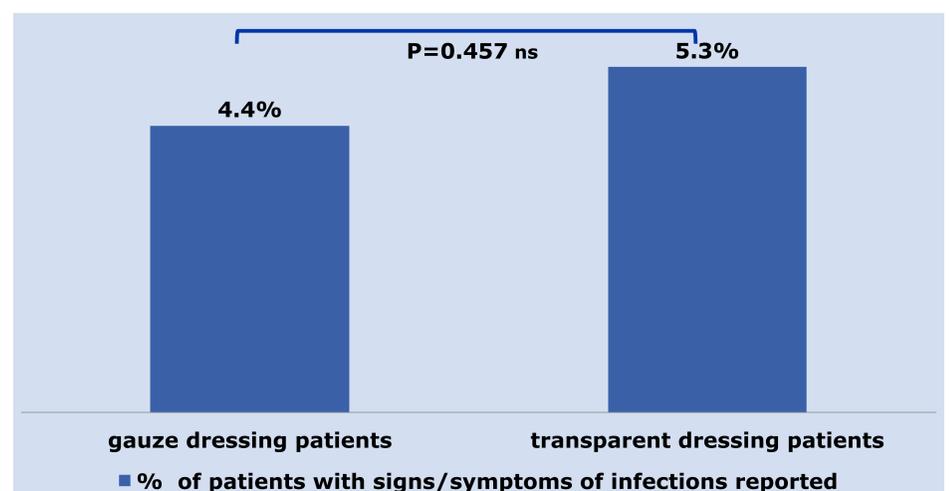
The project was designed as an observational, non-interventional, multicentre and international study within dialysis centres of the European NephroCare network.

Data collection related to the type of dressing, the dressing replacement frequency and the presence of signs/symptoms of infections was performed by using a clinical database (EuCliD).

Due to the longitudinal design of the survey all nurses potentially being in charge of CVC exit-site care needed to be aware of the importance of a complete documentation. Avoidance of both over- as well as under-reporting of possible complications and study endpoints was crucial for a high validity of the data collected.



Dressing type distribution



Percentage of patients with signs/symptoms of infections reported

Results

Data was extracted for 3,216 patients having CVC.

The dressing type distribution was as follows:

- gauze dressing 56.2%
- transparent dressing 39.9%
- other/no dressings 3.9%

The dressing replacement frequency distribution was as follow:

- every treatment 67.4%
- twice per week 1.8%
- weekly 30.8%

The percentage of patients with signs/symptoms of infections reported by the nurses was as follow:

- gauze dressing patients 4.4%
- transparent dressing patients 5.3%

The most frequent association was gauze dressing and every treatment for 73.5% of the patients.

Conclusion

Some authors recommended the use of sterile transparent film to dress the exit-site among patients undergoing haemodialysis [3-4]. However, this study showed that there was no statistically significant difference (p=0.457) between the two groups regarding the number of signs/symptoms of infections reported by the nurses.

Future studies need to evaluate outcomes in the CVC patients, focusing on the type of dressing and dressing replacement frequency with careful assessments of complications, functionality, cost benefit analysis, and last but not least, the patients' preference and quality of life.

Ultimately, this information will provide relevant indication to individualise and optimise the exit-site care, to reduce morbidity, mortality, as well as to increase the quality of life in this patient population.

References

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