



Plastic haemodialysis cannulae seem to be an optimal choice for some patients

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46th EDTNA/ERCA International Conference | Krakow | Poland | 9-12 September 2017

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Introduction

Plastic cannulae have been used in Japan for over 20 years in approximately 300,000 patients on dialysis three times a week with **very few adverse outcomes reported**. The main advantage seems to be the reduced risk of internal vessel wall damage. However, their studies also showed that **cannulation with plastic cannulae is more difficult** than with traditional metal needles. The main barrier appears to be the **higher costs** as compared to the metal needles.

Objectives

- To demonstrate that plastic cannulae can be an alternative to metal needles for AVF cannulation in patients with metal allergy.
- Explore the advantages of these cannulae using the best cannulation technique.

Methods

Our nursing team identified cases of metal needle allergy requiring alternative methods to continue using the AVF. We started cannulating with Monoflux[®] 14G a plastic cannulae by Vygon. In March 2017, we changed for the Supercath[®] 16G by Medikit.



Results (1/3)

- 34 years old female patient
- Start HD in May 2014 with CVC;
- RC left AVF since Jan 2015;
- Buttonhole since May 2015 until November 2015



Results (2/3)

Before Monoflux 14G

After 2 weeks



Results (3/3)



Results (4/3)

Before Supercath 16G

After 2 weeks



Conclusions

- Plastic cannulas offer a new and innovative way to cannulate AVFs and over time, expertise and training will enable us to implement a successful cannulation programme. Perhaps the biggest change to **cannulation practices to date is the introduction of the plastic cannulae for haemodialysis.**

"We believe to be able to keep patients suffering from uraemia and anuria alive so long as blood vessels for puncture are available." W.J. Kolff, 1944

**Thank You Very Much
for Your Attention!**

Acknowledgments

Pedro Goncalves	Head Nurse Fresenius Medical Care, NephroCare Viseu Viseu, Portugal
Sandra Campos	RN Fresenius Medical Care, NephroCare Viseu Viseu, Portugal
Jorge Melo	RN Fresenius Medical Care, NephroCare Viseu Viseu, Portugal
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