

ARTERIOVENOUS FISTULAE THROMBUS ASPIRATION THROUGH THE HEMODIALYSIS NEEDLE WITH ULTRASOUND GUIDANCE . A CASE REPORT

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Introduction

Thrombosis is an important complication of hemodialysis patients' vascular access. It can lead to permanent loss of the vascular access. Even if that is not the case, thrombectomy is an unpleasant procedure for the patient and an expensive one for the healthcare system . However , it is possible that a small clot that is being visualized in an ultrasound scanning of the arteriovenous fistulae , can be aspirated through a 15 Gauge hemodialysis needle. The patient can then go on with his hemodialysis session , using the same needle.

Case report

We present the case of K.M., a 63 year old patient undergoing three times a week schedule of hemodialysis since November 2010. The patient's first vascular access was a temporary Central Venous Catheter (CVC) placed in the right subclavian vein, followed by two unsuccessful PTFE grafts, two temporary CVC's and a permanent CVC that was removed due to infection of the exit site

The patient had a new arteriovenous fistulae (AVF) constructed in April 2016. In August 2016, during a routine AVF ultrasound scan prior to the hemodialysis session, we noticed a small floating clot in the vein lumen. The clot was spotted at the arterial puncturing site.

Measurements showed that the clot could be aspirated through a hemodialysis needle. Using ultrasound guidance we targeted the clot and inserted a 15 Gauge hemodialysis standard needle. After the needle tip approached the clot we implicated negative force by aspirating blood with a 20 ml syringe.

The procedure was successful and the clot was removed from the AVF. The patient then was cannulated with another needle and carried on with the hemodialysis session.

Conclusion

This procedure includes no stress or risk for the patient and it is cost free as it is carried out with standard dialysis equipment on the patient's dialysis day.

