

UPDATE OF THE PROTOCOL OF ANTICOAGULANT AND ANTIAGGREGANT MEDICATIONS TO BE FOLLOWED PRIOR TO THE INSERTION OF CATHETERS



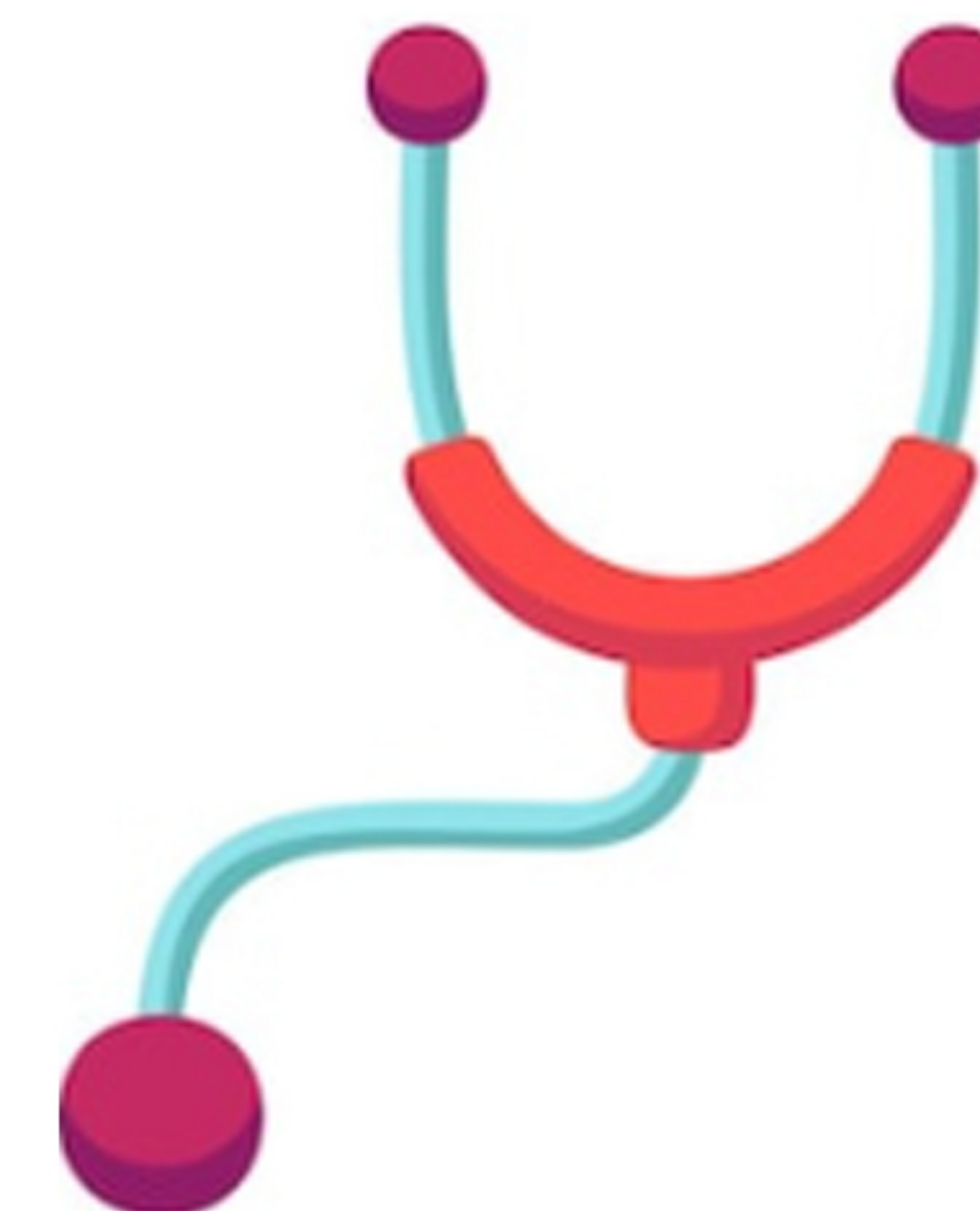
AUTHORS

Farré Chulilla, G; Galí Pedrola, M; Arenas Batista, G; García Delgado, T;
Esclusa Serra, M; Macià Calmet, T; Pozo Benítez, S; Martín Martínez, J.



CENTER - Althaia

Xarxa Assistencial Universitària Manresa



INTRODUCTION

In the last few years, the number of anticoagulant and antiaggregant medications patients has grown significantly. It is estimated that more than 800.000 patients are anticoagulated in Spain. Considering it is a chronic treatment, the patients will likely need a surgical or interventional procedure (PICC/midline) throughout their lives that will require the interruption of the aforementioned medication.

Even though recommendations on peri-procedure management have been published, in clinical practice, its implementation is scarce.

The implementation of PICC/Midline is considered a low bleeding risk procedure (those where the hemostasis can be executed properly. A possible bleeding is not a threatening risk, neither does it compromise the result of the procedure and does not

require transfusion).

Following the case of an anticoagulated patient (analytics with correct hemostasis values) that showed a hemorrhagic complication in the form of a big hematoma, brought the Intravenous Therapy Team to check the management of the antithrombotic and anticoagulant medications.

OBJECTIVES

- + Providing ETI the necessary tools for the secure implementation of PICC/Midline to patients on antithrombotic treatment.
- + Reduce the hemorrhagic risk.

MATERIAL AND METHOD

- + Continuous review of scientific literature in databases, manuals and consensus documents of scientific societies.
- + Consensus with the Haematology and Anesthesiology teams of our hospital on the elaboration of the protocol.

CONCLUSIONS

1. The preparation of this guide provides the Intravenous Therapy Team with security in the implantation of PICC and Midline and reduces possible potential bleeding risks.
2. This year an article was published where the Italian Group of Venous Access Devices (GAVeCeLT) had decided to develop a consensus on the management of antithrombotic treatment and bleeding disorders in patients requiring venous access devices. This article provides the final recommendations, however, in our center we have not yet updated our protocol.
3. Despite having the consensus of the experts, given the scant scientific evidence, it would be interesting to carry out some type of

RESULTS

What will we do before the implementation of the PICC / midline? -> Analytics

Blood count:

if platelets < 20.000 -> Consult with a responsible doctor (in order to transfuse 1 pool of platelets 30' before putting the catheter)



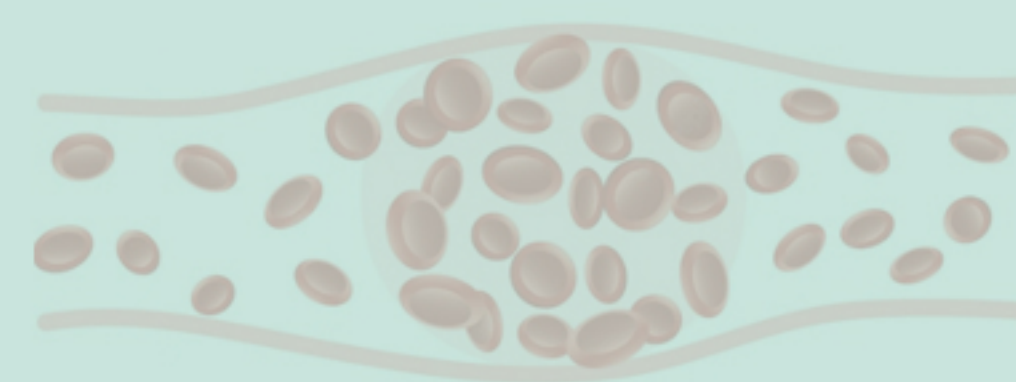
Coagulation:

1. INR/PT (International Normalized Ratio/ Protombine Time):

- **If not taking vitamin K antagonists** -> INR must be <(lower) 1.5.

If it is higher consult with a responsible doctor (in order to transfuse plasma o vitamine K).

- **if you take vitamin k antagonists** -> follow the table on the side.



2. APTT (Activated Partial Thromboplastin Time)

It measures how long it takes your blood to form a clot must be < 1.5 (if not consult with a responsible doctor).

What will we do if they take anticoagulant and/or antiplatelet drugs treatment? -> Treatment

#1 VITAMIN K ANTAGONISTS

Acenocoumarol: Synthrom

Aldocumar: warfarin

-> **DO NOT REMOVE**

- Make maximum INR 24h before the insertion. Must be within therapeutic range: 2-3.
- If it's carrier of a prosthesis of the mitral valve. The range is: 2.5-3.5.
- If you are out of range: Consult with a responsible

#3 HEPARINS

> Sodium heparin pump:

- Do not stop.
 - Make APTT maximum 24h before and must be between 1.5 - 2.5.
- IF YOU ARE OUT OF THIS RANGE - CONSULT with a responsible doctor.

> **LMWH (Low Molecular Weight Heparin):**

- **Prophylactic Heparin -> DO NOT REMOVE**
- Therapeutic Heparin -> **C/24h:** 12 must pass of the implantation. **C/12h:** The morning dose can't be administrared.

#2 ANTI-PLATELET DRUGS

Clopidogrel 75: Plavix, Iscover, Duolav, Agrelan,

Prasugrel 10mg: efficient

AAS (ASPIRINE): Trifusal, Disgren, Tromalyt, Bioplak

Tricagrelor: brilique

Dipyridamole: Persantin

Tirofibian: Agrastat.

-> **DO NOT REMOVE**

#4 DIRECT ACTING ANTICOAGULANTS (DOACs)

Rivaroxaban: Xarelto

Dabigatran: pradaxa

Apixaban: Eliquis

Edoxaban: Lixiana

-> **C/24h :** AVOID TAKING DOACs 6 HOURS BEFORE AND 6 HOURS AFTER IMPLANTATION.

-> **C/12h :** DO NOT GIVE THE MORNING DOSE.