

The Royal Wolverhampton Hospital NHS Trust

Renal Unit

Policy Reference:

Policy Title: Policy for the use of Tinzaparin Low Molecular Weight Heparin (LMWH) in Haemodialysis patients

Date of Implementation: March 2012

Version April 2012 v2

Date of Review: April 2015

Person Responsible for Implementation and review: Renal ANP

Policy Location: Renal Unit Intranet site

1.0 Introduction

1.1 The Department of Health has a long term strategy for ensuring patient safety in all Healthcare settings (Department of Health 2000) and the National Patient safety Agency plays a key role in the implementation of this agenda.

1.2 The European Best practice guidelines Expert group on haemodialysis recommend the use of LMWH but do not provide any practical guidance on its usage.

1.3 Utilising this policy will enable optimal safety for those patients being dialysed on our dialysis units.

2.0 Purpose

2.1 This policy provides direction for all staff that administer or prescribes LMWH for our Haemodialysis patients.

2.2 Staff should ensure they familiarise themselves with and adhere to the contents of this policy.

3.0 Objectives

3.1 To ensure the safety and well being of patients receiving Tinzaparin ensuring correct anticoagulation is achieved and minimising potential side effects.

4.0 Detail

- 4.1 See attached Algorithms 1 – 3 from Barts and the London (Appendix 1)
- 4.2 LMWH should be administered via the arterial port on the Haemodialysis machine lines.

5.0 Finance

- 5.1 Significant cost savings enabled in comparison to using unfractionated Heparin.

6.0 Training

- 6.1 Initial training will be provided and knowledge updated at yearly competency assessments.

7.0 Communication

- 7.1 The policy will be communicated via the specialty structure and be accessible on the trust intranet

8.0 Maintenance

- 8.1 The Renal Advanced Nurse Practitioner to co ordinate the review of this policy

9.0 Monitoring

- 9.1 The policy will be audited monthly by the monitoring of any adverse incident reported on Datix within the specialty.

10.0 Equality and Diversity impact

- 10.1 There is no indication that this policy adversely impacts on equality and diversity

11.0 References

Department of Health (2005), A safer place for patients; learning to improve patient safety. Department of Health, London

Department of Health (2000), NHS plan: a plan for investment for reform. Department of Health, London

European Renal Association.
European Best Practice guidelines expert group on haemodialysis. Section v.
Chronic intermittent haemodialysis and prevention of clotting in the
extracorporeal system.
Nephrology Dialysis Transplant 2002;17 9Suppl. 7); 63 – 71

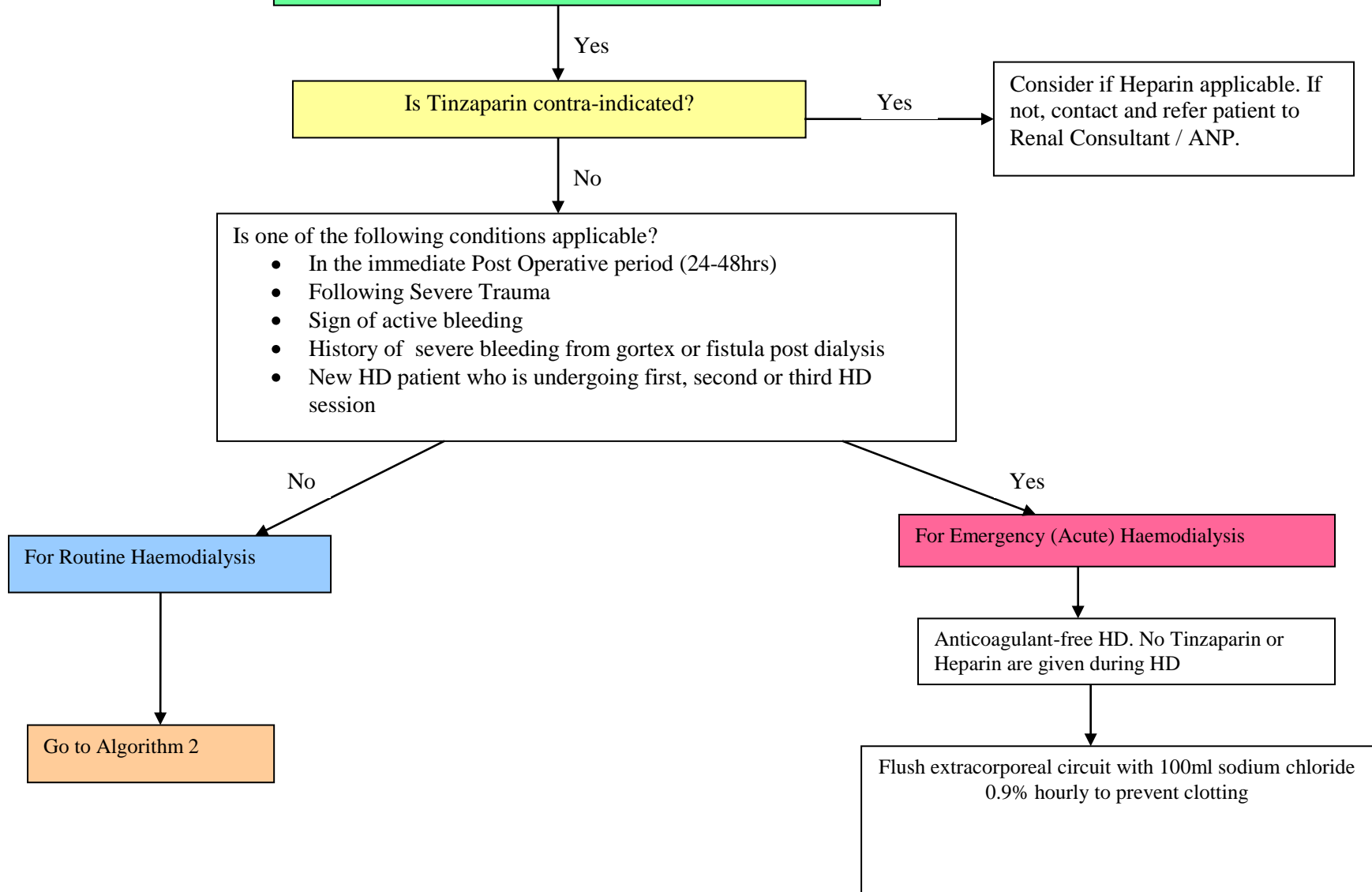
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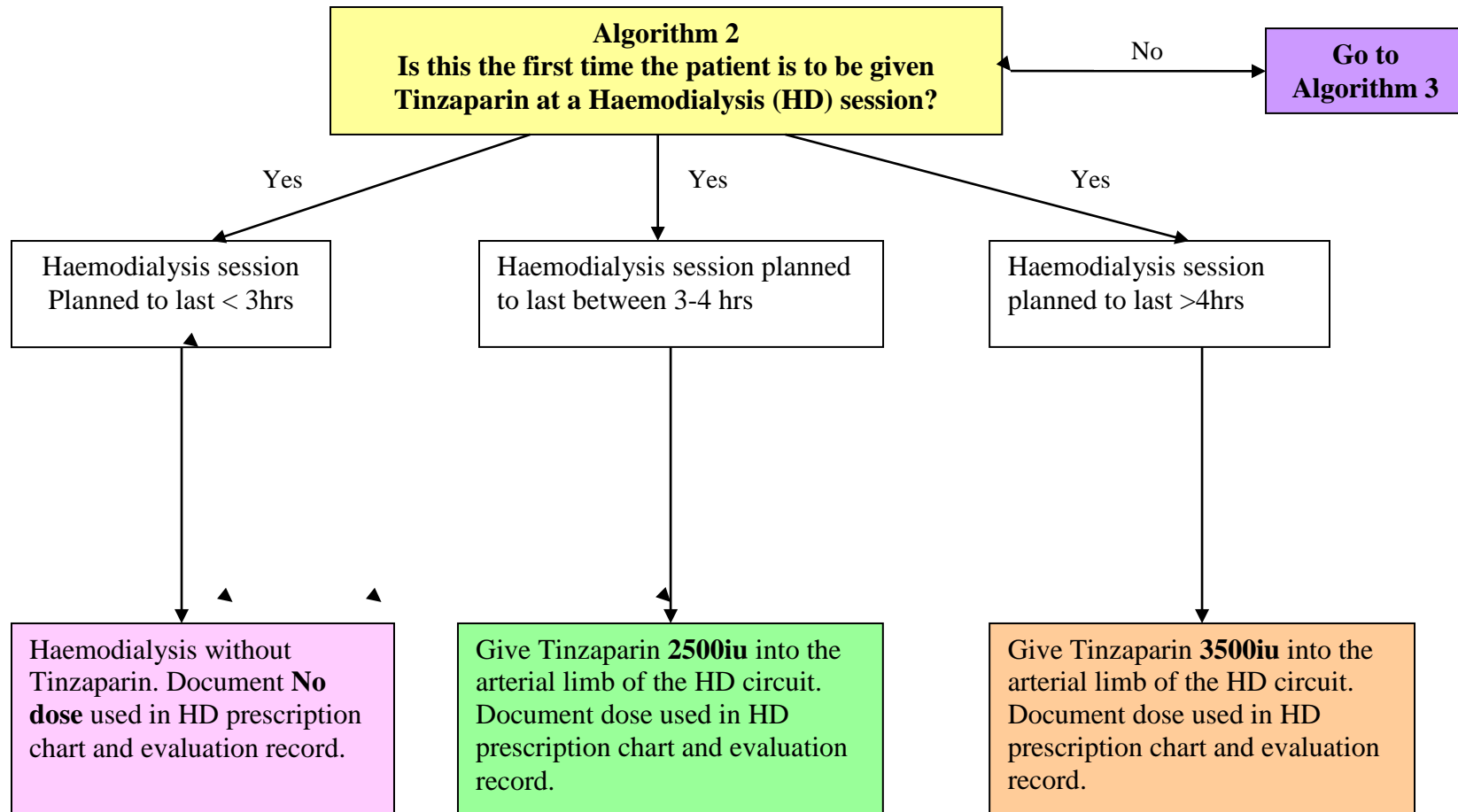
12.0 Bibliography

www.dh.gov.uk

www.npsa.nhs.uk

Algorithm 1 Patient Requires Haemodialysis (HD)





**Algorithm 3
For Routine Haemodialysis (HD)**

**Haemodialysis session
planned to last < 3hrs**
(previous No Tinzaparin given)

**Haemodialysis session
planned to last between 3-4 hrs**
(previous HD given Tinzaparin 2500iu)

**Haemodialysis session
planned to last >4hrs**
(previous HD given Tinzaparin 3500iu)

Circuit clotted on previous session?

No

Yes

No

Yes

No

Yes

Haemodialysis without Tinzaparin. Document **No dose** used in HD prescription chart and evaluation record.
If no clots observed then continue without Tinzaparin on next HD session.

Give Tinzaparin **2500iu** into the arterial limb of the HD circuit. Document dose used in HD prescription chart and evaluation record.
If no clots observed then continue with this dose on next HD session. *

Give Tinzaparin **3500iu** into the arterial limb of the HD circuit. Document dose used in HD prescription chart and evaluation record.
If no clots observed then continue with this dose on next HD session. *

Give Tinzaparin **4500iu (max. dose)** into the arterial limb of the HD circuit. Document dose used in HD prescription chart and evaluation record.
If no clots observed then continue with this dose on next HD session. *
If max. dose given and extracorporeal is circuit still clotted., refer patient to Renal SpR / Consultant / ANP