THE AMBULATORY DVT PATHWAY

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THE FACTS!

- **10% of hospital deaths**

- **0.4% of hospital admissions**
  - Khan et al. Haematology Association of Ireland Annual Meeting 2015

- **7000 patients and 2000 admissions with HA-VTE**

- **Healthcare costs of €161 million**

THE NUMBERS

1 in 4 1-3 #1 60%

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OUR LADY OF LOURDES HOSPITAL

Before VTE service

- Assessed and managed
  - Emergency Department (ED)
  - Acute Medical Assessment Unit (AMAU)

- Positive VTE
  - Admitted for three days
  - No hospital follow up

VTE NURSE’S ROLE

- Introduced in 2015
- Multidisciplinary team
- VTE workup
- Risk assess – wells score, d-dimer, doppler
- Patient education
VTE Pathway in OLOL

- Health assessment by VTE nurse
- Wells score
- FBC, U&E, LFTs, CRP, Coag, d-dimer
- Calculate renal function
- US scan
- Weight, height

DVT OUTPATIENTS PATHWAY

- Assess Venous Probability score
- Health visits
- Medication / NP Fernandez
- MRC / Adjustment
- Perform venous testing
- Resting / US scan
- Performed: US scan, & Duplex US
- PAP/US: US scan
- Lytic dose: 50 mg IV
- Weight
- Weight

PREVIOUS MANAGEMENT OF DVT

- Treatment dose low molecular weight heparin (LMWH) as per weight
- Doppler ultrasound
- Treatment with oral anti-coagulants
  - Warfarin
  - Apixaban
  - Dabigatran
  - Edoxaban
  - Rivaroxaban

PRESENT MANAGEMENT

- Rivaroxaban and Apixaban
  - licensed to prevent & treat DVT
  - Equal efficacy & better safety profile than LMWH, Warfarin
- Benefits
  - Patient – discharged on tablet, no return to hospital
  - Hospital – reduction in costs, number of patients attending ED/AMAU

Direct Oral Anti-coagulants options

Rivaroxaban (take with food):
- 15 mg PO BD for 21 days 3 weeks
- 20 mg PO OD for the next 3 months

Apixaban (take with food):
- 10 mg PO BD for 7 days
- 5 mg PO BD for 3 months

• To Take Home (TTH) packs available
• 3 days supply of tablets
CONTRAINDICATIONS TO OUTPATIENT MANAGEMENT OF SUSPECTED VTE

- Suspected PE - admit
- Suspected proximal lower limb DVT or upper limb DVT
- Known allergy or sensitivity to DOACs
- Established on Warfarin or LMWH
- Pregnancy or breast feeding
- Alcohol dependence
- Age <18 years
- Active bleeding / significant risk of bleeding
- Significant renal impairment
- Suspected compliance issues
- Severe acute venous obstruction or limb ischemia
- Other medical / surgical problems requiring admission

BLEEDING RISK

- Congenital or acquired bleeding disorders
- Uncontrolled severe arterial hypertension (>160/110 mmHg)
- Active ulcerative gastrointestinal disease
- Recent gastrointestinal ulcerations
- Liver disease (INR ≥ 1.5), including cirrhotic patients with Child Pugh score ≥ B
c- Moderate to severe renal impairment (CrCl < 50 ml/min)
- Recent intracranial / intracerebral haemorrhage
- Recent brain, spinal or ophthalmological surgery
- Bronchectasis or history of pulmonary bleeding
- Patients on other drugs which may affect haemostasis, including:
  - NSAIDs e.g. Ibuprofen, Diclofenac
  - Antplatelet agents e.g. Aspirin, Clopidogrel
- HAS-BLED Score - Stratiflying bleeding risk in patients with AF taking DOAC
- Vascular retinopathy

TO CONCLUDE

- By improving our clinical practice, we can provide a treatment option with similar efficacy and better safety profile compared to previous treatment to patients with suspected lower limb DVT.
- More importantly, we can achieve a significant reduction in time, cost and resources.
- Patient commenced on DOAC’s follow up is very important.

REFERENCES

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3) https://www.accessdata.fda.gov/drugsatfda_docs/label/2012/202155s000bl.pdf

9) Abbreviated MDRD (Modification of Diet in Renal Disease) equation: https://www.mdcalc.com/mdrd-gfr-equation
13) http://www.medicines.ie/medicine/15447/SPC/Eliquis+2.5+mg+film-coated-tablets/INTERACTIONS
14) http://www.medicines.ie/medicine/15574/SPC/Xarelto+15mg+film-coated-tablets/INTERACTIONS
17) https://www.elixquis.com/elixiqui/hcp/dosing#accordion/tab2
THANK FOR LISTENING - ANY QUESTIONS??

- Platelet party!
- What's going on here?
- Platelet party!
- Why, I haven't had this much fun in years!
- Platelet party!
- I think we're stuck.
- Platelet party.
- Oh, seriously, we're stuck.
- Platelet party.

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