

Chronic transfusion project

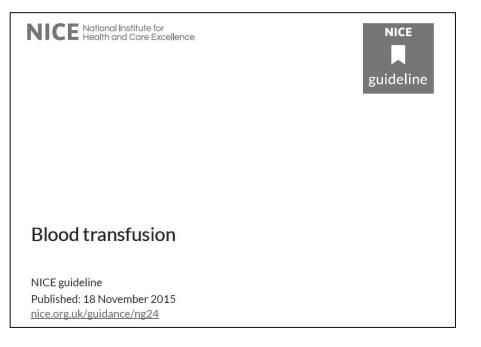
Review of the impact of transfusion treatment plans on the Haematology Day Unit

> Everyone Working Together Difference

Helen Maria, Transfusion Specialist

NICE 24 Blood transfusion 18th November 2015

- Clear advice on transfusion thresholds in general clinical settings
- Introduced concept of setting individual targets for chronic transfusion dependent patients
- Aware strict application of NICE guidance can cause issues with this patient group
- Discussed project with Haem Day Unit medic and sister



Aims of treatment plan

- Plan on Millennium system so accessible to all areas
 - Developed with IT
- Clear advice to nurse led unit when (and when not) to transfuse – avoid unnecessary transfusion
 - Efficient use of clinical space and staff
- Accounts for relevant co-morbidities and patient's symptoms
- Quality of life a key factor

Basic Information Primary Diagnosis Myelodysplasia Relevant Co-Morbidities see recent clinic letter Relevant Medications see recent clinic letter Haemoglobin Threshold (i.e. Transfusion Trigger) Maintain Hb above 85 g/L If Hb <70g/L, transfuse 3 units If Hb ≥70g/L, transfuse 2 units If Hb ≥86g/L transfuse 1 unit If Hb ≥93g/L, do not transfuse **slower transfusion rate - suggest 3 hourly.** **will need frusemide after 2nd unit - 20mg as per PGD**

Haemoglobin Target Range (Should not exceed 100 g/L) Do not exceed Hb 100g/L Platelet Threshold (i.e. Transfusion Trigger) Do not transfuse unless wet bleeding (WHO bleeding scale 2-4) EPO Result (If Applicable) : Serum Erythropoietin (mu/mL) 14/Sep/17 13:02 BST Serum Erythropoietin 325.0 mu/m1 HI Serum Ferritin (Advise check after 20 units of packed red cells) : Serum Ferriti 08/Sep/17 19:29 BST Serum Ferritin 212 nanogram/mL Normal If serum ferritin >1000ng/mL inform consultant haematologist to consider suit therapy (BJH 2014,164,503-525)

The MPN group – route to regular transfusion programme

- 25 to 30 patients at any time receiving chronic transfusion support
- Liaise with senior nursing staff and day unit doctor
- Discuss transfusion plan detail with each patient – variable requirements
- Programme to run with senior nurses and doctor to prescribe as required



Best laid plans and problems....



- May 2017 trouble at t'mill...
- Doctor and senior nurse on long-term sickness Haem day unit in crisis
- Ambulatory Care area unhappy about number of haem/onc referrals
- Started project solo with haematology medical staff permission
- Approved to authorise blood transfusions from April 2016
- Lots to learn!

Getting started – setting limits



- Transfusion Treatment plan template launched on Millennium
- Patient list on Millennium all haem clinical staff given access
- Completed for all relevant patients
- Education for day unit staff re. my role managing chronic tx dependent group
 - New referrals from haematology
 - Not ad hoc transfusions from clinic

Checklist for transfusion management

Daily appointment lists on ARIA

Patients given next appointment letter and blood forms – advised to have bloods 2 days before next appointment

- Check blood test results 24-48 hours before appointment
- Assess and authorise number of units required as per plan
- Cancel and inform patients who do not require transfusion
- Check transfusion waiting list for one-off referrals and book in where possible
- Inform lab of number of units required for each patient
- Document EVERYTHING centrally



Results (expected and unexpected)

- Results being monitored so...
- Patients cancelled in time to book in replacements, therefore....
 - Referral waits shorter than before and...
- Fewer referrals to Ambulatory Care due to lack of capacity
 - Better use of Haem Day Unit capacity
- Laboratory %issue rates improved less units issued then returned unused

Patients transfused	Haem/Onc DU	Amb Care	Haem/Onc referrals to AC
Jan- May 17	204	122	33
Jun- Oct 17	249	131	16



Platelets...

- Started implementation of BJH 2016 guidance for platelet transfusions
- Previously using platelet count <10 to transfuse in chronic BMF</p>
- Platelet transfusions now rare for this group
- Only transfused if reporting bleeding (WHO 2-4) and/or additional risk factors
- Platelet wastage due to 'just in case' orders for chronic BMF – no longer an issue



Assessment so far

Feedback from Day Unit staff overwhelmingly positive

- Supported point of reference
- Greater control of unit chair space

Patients delighted with service -

- can feel 'abandoned' when referred for chronic transfusion support
- medical response to any queries or concerns on the day
- Laboratory staff not issuing unnecessary units better stock management



The future



More transfusion referrals to community hospitals

Empower unit to manage their own patients

• Staffing issues

Senior nurses on Haem Day Unit to become non-medical authorisers of blood

- Take on new referrals and manage list
- Introduce PGDs for supporting medication done

CHRONIC TRANSFUSION PROGRAMME



Thank you!

