NORTH EAST & YORKSHIRE
REGIONAL TRANSFUSION COMMITTEE

NHS
Blood and Transplant

# Clinical Scenarios

Caring Expert Quality

# Patient 1

NHS
Blood and Transplant

## Haematology

- MDS with excess blasts-last bone marrow shows stable disease
- On **Azacitidine**
- Bloods checked every 2 weeks
- Past Medical History: Cardiomyopathy -unable to have intensive treatment due to Ejection fraction 10%.
- Blood Results:
  Hb 90g/L  WBC 3.6  Platelets 54  Neutrophils 1.58

**What would you consider in regard to transfusing this patient?**

# Patient 2

NHS Blood and Transplant

## Haematology

- Anaemia with component of cold haemolysis. Anaemic since 2012, gradual decline. Ribs, thighs and upper arm pain, ? associated with anaemia.
- Had rituximab and steroids. Now transfusion dependent
- Blood Results:
  Hb 93g/l  WBC 5.8  Platelets 311  Neut 3.11

**What would you consider in regard to transfusing this patient?**

# Patient 3

NHS Blood and Transplant

## Surgical / Haematology

- MDS with excess blasts. Bone marrow biopsy in July 2020 shows minimal progression. To continue on Azacitidine
- Perianal abscess/legion requiring regular dressing / packing
- Blood Results:
  Hb 80g/L  WBC 9.7  Platelets 11  Neut 4.99

**What would you consider in regard to transfusing this patient?**

Patient 4

NHS Blood and Transplant

# Bleeding in Theatre

- Female Patient in her 40's admitted with advance rectal cancer.
- Taken to Theatre where she started bleeding at varying rates over a 2 hour period
- Being monitored via Thromboelastograph Viscoelastic test (ROTEM or TEG Thromboelastography).
  Point of care testing (POCT) so no formal samples sent to Lab.
- No documentation of blood loss
- Patient received 26 units of red cells, 6 of FFP, 2 of platelets, 2 pools of cryoprecipitate and Fibrinogen concentrate.
- Patient died 3 hours later during the surgery

**Discuss this case, what do you think should have occurred?**

# Patient 5

NHS Blood and Transplant

## ED attendance

- Patient in her 60's was readmitted with bleeding from arthroscopy sites
- Hb had fallen to 67g/L from 87g/L four days previously
- Patient was on warfarin for mitral and aortic valve replacements. INR 7.7
- BP 120/70, HR 87, SaO2 98% room air, RR 25

**What would you do?**

Patient 6

NHS Blood and Transplant

# Emergency Department

- 59 year old male
- Had wine and cheese with family last night, vomited in night, thought it was wine, vomited again when went to toilet, collapsed hit head.
- Wife found clots in underwear and coffee ground vomiting.
- Past Medical History: Ischemic Heart Disease (previous CABG 18 months ago)
- Exercise tolerance - miles
- Multiple myeloma
- AF on Apixaban
- HR 82, BP 120/76, RR 19, SaO2 100%, GCS 15/15. Hb 117 which dropped to 98g/L in ED

## Discuss treatment options

# Patient 7

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## Orthopaedic

- Female patient in her 70's, weight 54kg, Hb 67g/L following revision surgery
- Fluid balance 1125mL Positive
- Pre op chest x ray signs of consolidation possible infection
- Past Medical History: IHD ( Ischemic heart disease)
- Decision made to transfuse 2 units red cells
- Following the second unit RR 31, 'wet chest', SaO2 90%, HR 123, BP 175/95

**Discuss this situation**

# Patient 8

NHS Blood and Transplant

## Elderly Medical

- Patient admitted via GP with Hb 66g/L with associated shortness of breath and fatigue.
- No evidence of acute haemorrhage. Patient had OGD 3 years prior but no recent investigations
- Blood Results :
  Hb 66 (previously 110g/L), MCV 65.6, Iron 2.3, Ferritin 5

**What would be your treatment plan?**

# Patient 9

NHS Blood and Transplant

## Medical

- 72 year old female
- Attended ED with increasing shortness of breath and chest pain over last few days
- Previous history; Recurrent IDA (Iron Deficient anaemia) , Aortic Stenosis, Type 2 DM, diverticulitis, on edoxaban
- HR 100, BP 107/63, RR 21, SaO2 100% room air, Temp 36.1, Weight 98.6kg
- Hb 44g/L Ferritin 14

**What would you do?**

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# Clinical Scenarios Paediatric

Caring Expert Quality

# Patient 1

NHS Blood and Transplant

## 6 week old baby

- Hereditary Spherocytosis abnormal EMA and spherocytosis on blood film
- Weight: 6.2kg; 25 50th centile (Birth weight 3.2kg)
- Height: 60.9cm; 25 50th centile
- OFC: 43cm; 98 99 th centile
- Medications Folic Acid 2.5mg once daily
- Hb 75g/L and symptomatic of this.  Bilirubin 7

**What would be the next steps?**

Patient 2

NHS Blood and Transplant

## Four day old baby

- Hypoplastic left heart and suspected Di George syndrome underwent cardiac surgery and received several non-irradiated red cell components (including units for priming the pump) as the junior doctor had informed the lab that the patient did not require them. At a later date when the patient was put onto ECMO (extra corporal life support) it was realised that the patient should be receiving irradiated components.

**What went well?**

**How would you treat the patient?**

**Does this need reporting?**

# Patient 3

NHS
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## Girl receiving treatment for a brain tumour

- Attended hospital as had petechial rash.
- Platelet count 3 x 10 9 /

## What would you write up?

- What if the patient had a temperature rise with her transfusion $40^0$ C baseline was 37.6 o C, all other observations stable.

## What would you do?

# Patient 4

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## 32 week old baby

- PPROM, pulmonary hypoplasia
- Significant Persistent Pulmonary Hypertension of the newborn
- Hypotensive
- Coagulopathic
- PT 72 ( 9 14)  INR 6.4  APTT 95 (23.5 37.5)  APPT R 3.1
- Fibrinogen 0.5 g/L ( >1g/L)

**What do you think?**

**What other tests might you do?**

# Patient 5

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**39 week old baby**

- Normal Vaginal Delivery
- Petechial rash

**What are your thoughts?**

- Hb 218g/L
- WCC 20.23
- Plt 18

**What may cause this?**

**What should you think about?**