ABO Incompatible Transfusion

West Midlands Regional Transfusion Committee

'An Inspector Calls'

Thursday 3rd July 2014

University Hospital Birmingham Post-Graduate Centre

Mike Herbert

Pre-Transfusion

08:19 - 2 units of group A Rh (D) positive red cells collected from main Issue fridge.

08:31 — both units entered in clinical haematology satellite fridge

09:44 - First unit collected from satellite fridge for transfusion & pre transfusion observations recorded:

Temp 36.4°C, Resps 17, Pulse 90, BP 94/58, SaO₂ 100% on air

09:50 — Discrepancy noticed during bedside check between blood group of pack (A) and patient's blood group (O) Transfusion started.

During Transfusion

15 minute observations:

Temp 37.0°C (0.6°C1), Resps 16, Pulse 651, BP 100/65,SaO₂ 100% on air.

11:30 - 1 hour 40 minutes from commencement:

Patient complained of feeling cold - observations checked:

Temp 38.2°C (1.8°C), Resps 17, Pulse 72, BP 155/79, SaO₂ 99% on air

No other clinical symptoms identified, FY2 informed (patient not seen) and paracetemol prescribed

Post Transfusion

12:10 - 2 hours 20 minutes from commencement transfusion completed:

Patient complained of of chest pain and moved from chair to bed whilst observations checked & FY2 informed:

Temp 38.5°C (2.1°C↑), Resps 17, Pulse 72, BP 158/80, SaO₂ 99% on air

12:30 - 2 hours 40 minutes from commencement:

FY2 reviewed patient. Nil acute found on clinical examination and vital signs stable. Unit checked against documentation issued by blood bank and ABO incompatibility identified.

12:52 - 3 hours 02 minutes from commencement:

observations checked:

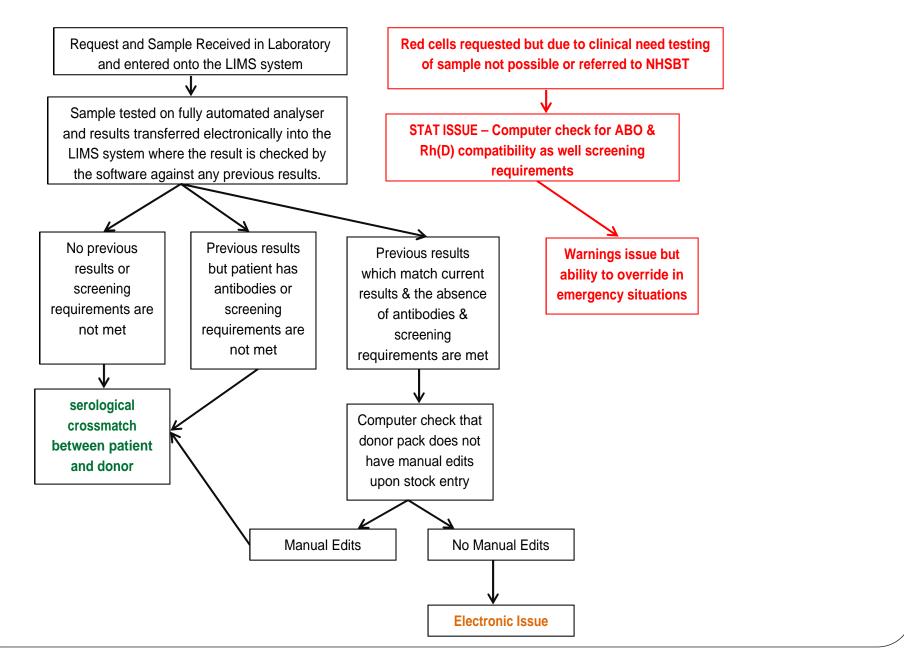
Temp 39.1°C (2.7°C⁻), Resps 16, Pulse 80, BP 158/88, SaO₂ 96% on air

Pre Transfusion Laboratory

13/11/2013 14:13 - Blood Transfusion request form and sample for 2 units of red cells received for transfusion on 18/11/2013—routinely tested as Group O Rh (D) positive with No Irregular Antibodies Detected which matched historic data.

15/11/2013 08:42 - ABO incompatible red cells issued for an elective transfusion (G0956131341868 & G052513599280C) — Both units Group ARh (D) positive.

Issuing Red Cells Algorithms



Types of Red Cell Issues

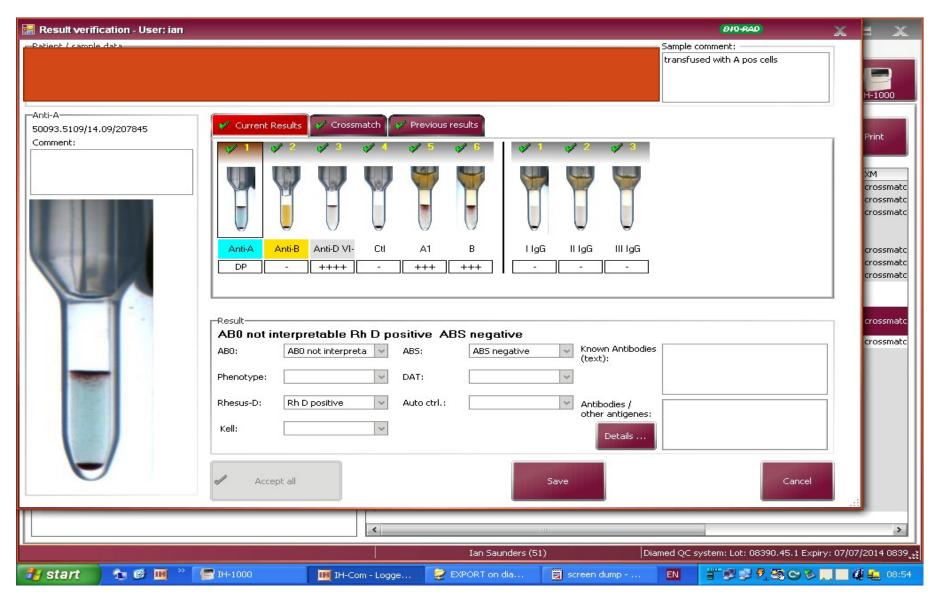
Definitions of Types of Issue

STAT – The Issue of red cells without any form of testing in local laboratory but with a computer ABO Rh(D) type and screening requirements check.

Electronic Issue — The Issue of red cells with a full ABO Rh (D) typing and negative antibody screen on a minimum of 2 occasions and no manual interventions in the process and with a computer ABO Rh (D) type and screening requirements check.

Serological Issue - The Issue of red cells with a full ABO Rh(D) typing and negative antibody screen on only 1 occasion or manual interventions in the process or a positive antibody screen and with a computer ABO Rh(D) type and screening requirements check.

Laboratory Results



Laboratory Results

Pre Transfusion DAT Negative

Post Transfusion DAT Negative

Pre Transfusion Bilirubin 18 (0-20umol/l)

Post Transfusion Bilirubin 68 (6 hours)

Post Transfusion Bilirubin 44 (12 hours)

Post Transfusion Bilirubin 19(48 hours)

Post Transfusion Haptoglobin 0.14 (0.45-2.42 g/l)

Pre Transfusion Hb 91 g/1

Post Transfusion Hb 83 g/1 (6 hours)