

LABORATORY EMPOWERMENT



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Laboratory Personalities



taking

Maidstone and Tunbridge Wells







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WHAT DO WE ACTUALLY MEAN BY LABORATORY EMPOWERMENT?

Most people know what it is. Majority aren't keen to define it.

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TO FIND MEANING WE NEED TO LOOK AT A FEW THINGS:

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Brief look at some case scenarios

Training practices and appraisal

The effects of the new world of Pathology Reconfiguration on lab practices

Self application and motivation/ Modernising Scientific Careers (MSC)

Conclusion

Single Unit Transfusion. BMS part to play in Give one unit, Reassess encouraging blood results check Hb Post ops Nice Quality after each before giving Standard 138 another. unit. statement 3

Importance of Lab opinions

Implementation of new practices

Amendments to current processes

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Scenario 1:

Patient admitted to A&E with coffee ground vomiting and malaena. Due to the condition of the patient a code red was declared and 2 units of Emergency O Negative blood was transfused.

This patient has an anti-c antibody which makes Emergency O Negative blood incompatible and could potentially result in an acute transfusion reaction.

According to the observations recorded at the time of the transfusion it appears that the patient did react to the Emergency O Negative blood but this may have also been caused by the patients underlying condition.





This lady is a haematology patient with AML.

Problems grouping her from the first sample, received .

Patient grouping as a group O in forward group but a group A in reverse.

When tube grouped (and put up in Dia-Med gel grouping cards) there was a very weak mixed field reaction in anti-A & Anti-AB. Due to the mixed field looking reactions we queried with the haematology team as to the possibility of this patient having had a Stem Cell Transplant, which she had not.

We therefore decided to refer a sample to RCI Tooting for grouping.







Scenario 2 continued

RCI grouping report for sample dated 08/07/:

O RhD positive C-c+E+e-K+

The patients red cells typed as group O. We have since spoken to RCI for further information and they responded that they performed group at 4°C in tubes and that they had issue with the patients reverse group whereas we are having problems with the patients forward group using similar techniques. They could not advise me any further - therefore please send sample away Monday 18/07/ for repeat testing at Tooting.

(Genetic testing eventually revealed a group AO)



- AE send sample for FBC on patient with no clinical details.
- HB= 74, PLT=25, RET=294, Bilirubin= 79.
- BMS Requested blood film.

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- BMS Phoned AE, gave blood results and asked for clinical details
- The answer: "I will come back to you, doctor is with another patient."
- Blood film showed: spherocytes, fragments, thrombocytopenia, poikilocytosis, then retics and bilirubin both were high which suggested haemolytic anaemia.
- BMS Phoned switchboard and asked to speak with Consultant Haematologist oncall.
- Consultant Haematologist asked to send blood film to the other site urgently and asked if AE doctor can ring back
- BMS Spoke with AE doctor, asked for clinical details again, the answer was "I finished with patient and she is discharged home now".
- BMS Packed blood film and sent by courier.
- BMS Phoned night BMS at the other site and informed about urgent blood film coming for Consultant Haematologist.



Scenario 3 continued

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PT	11.7	RDW	+ 19.5	IRF	42.7
APTT	27.8	Neuts	+ 8.91	I	
FIB	2.64	Lymphs	+ 4.52	I	
Hb -	68	Monos	+ 1.11		
WBC +	14.66	Eosin	0.08		
Plts -	14	Baso	0.04	I /	~
Hct -	0.204	MPV	0.0		
RBC -	2.19	PCT	0.00	I .	
MCV	93.2	NRBC	0.35		_
MCH	31.1	RETP	13.9		
MCHC	333	RETA	+ 304.00		



Scenario 3 Blood Film



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Refer to Consultant Haematologist general queue:

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NHS Trust

- Mild lymphocytosis with some reactive lymphocytes seen
- Moderate polychromasia with some spherocytes and the occasional schistocyte and nucleated red cell seen
- Thrombocytopenia and red cell fragments. Leucoerythroblastic blood film. MAHA cannot exclude TTP





- Code Red patient with a known Anti-E who required E-,c-,K- red cells was tranfused 2 units of emergency O Negative blood. which would have been positive for the little c antigen.
- Due to the patient's red cell phenotype there's the possibility of sensitisation and creating further antibodies.



Strange experience in the early days/ not giving group specific on one sample two methods result. Group A Positive. Patient was O Negative. Patient a young female.





Training and Education

Internal continuous learning (CPD, staff tutorials)

Recognised staff CPD sessions Use of Training tools (Webinars NEQAS TACT)

External Courses

Incident investigations



Staff

recruitment

(Train your

own/Specialist

portfolio)





LABORATORY EMPOWERMENT IS NOT REALLY NEW TO BLOOD TRANSFUSION, AND IS A NATURAL EVOLUTION TO SCHEMES LIKE BETTER BLOOD TRANSFUSION 1, 2 AND 3 (From 1998. 2005 AND 2007).

WHICH BECAME PATIENT BLOOD MANAGEMENT





Effects of Re-Configuration and Pathology Networks

- More for less/Inexperience/Deskilling/Time issues
- Evolution of Laboratory Science and Practice
- Self motivation
- Modernising Scientific Careers/Reorganising Scientific careers
- Different types of laboratory practice/ Listening to lab experts opinions while reconfiguring services.





Conclusion

Some may say Medical Laboratory Science has been in transition for over 100 years. Certainly things are changing and inevitably scientists will be compelled to apply themselves to the new demands created by initiatives like Pathology reconfiguration/Networks and other measures to create a leaner more cost effective Laboratory service.

Laboratory Empowerment is a broad topic that covers better practice and projection of the Lab by medical lab professionals. This cannot be removed from training, continuous professional development and the reconfiguration of professional careers to suit new demands.

It is also important for lab staff to present themselves in the right way, and educate others outside the lab about their structures and uses especially with regard to supporting patient safety, patient care and sharing and improving scientific knowledge and application.



The correct empowerment of the Laboratory will definitely help "Make a nice change in Transfusion."





THANK YOU FOR LISTENING



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