IT CAME FROM THE BOOKSHELF

Van Loghem et.al.

- "If I have seen further, it is by standing on the shoulders of Giants" (Issac Newton 1675).

- The day the textbook came in handy.

- Van Loghem et.al. (1957) just one of the 24 references cited in just over one page in a textbook on a dusty shelf in our lab.

The Patient

- Male, DOB: 15/12/34.
- 2002: Chest pain
- 2007- 2008: UTI, Gall bladder colic, Prostate cancer and prostatectomy.
- 2010: Dysplastic blood film. Hb = 109g/L, Plt = 69. Diagnosed with MDS.
- 2011: Myelodysplasia with blasts and episodic bleeding. Hb = 106g/L, Plt = 11

Discrepant blood group

- 23/12/11- Group and save: B pos negative antibody screen
  - Hb = 108 and Plt = 9.
  - Platelets issued over 3 months, when platelets less than 10.
  - On February 16th 2012 the patient noticed his blood group on paperwork was wrong!!!
  - Claimed it was AB pos???
  - Confirmed by Symbion (Laverty) and blood donor card as AB pos.
  - Sent off to RCRL where he was grouped AB pos.

??????????

◦ Why did we get the blood group wrong?

◦ Usual suspects of age, bone marrow transplant ruled out.

◦ "loss of or reduction of expression of A antigen due to disease" (Daniels, G. *Human Blood Groups,* 2nd ed. 2002).

◦ The MDS that was diagnosed in 2010!!!

Interesting!!!

◦ First grouped as AB pos in 2004 by Laverty Pathology.

◦ 2007 Laverty issued him over 10 units of B pos and O pos units. His blood films were relatively normal with a left shift of the myeloid lineage.

◦ 2011 presented with a leucoerythroblastic blood film.

◦ Last blood group in 2007 with Laverty was AB pos.

◦ So somewhere between 2007 and 2011 his A antigen expression was so reduced we could not detect it via card and the RCRL could only detect it by tube, with extended incubation.

DECEASED

- Patient died on 22/01/13 in palliative care.
- Pleuritic chest pain, decreased renal function and despite numerous transfusions his platelet count and haemoglobin remained low.

Thank you to those that have come before me, especially to my peers, work colleagues and superiors and to those that come after me, have fun learning!