Obstetric screening issues

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- Case one– anti kell antibody issues notification issues
- Case two – missing anti Kpa antibodies

Case 1.
Anti Kell antibody notification issues

- Anti K detected at booking sent off for titre to NBS
- Titre = 8. wording on report led clinical staff to think risk was low
  - “Anti-K is more likely to cause fetal anaemia than hyperbilirubinaemia. The risk of HDN is low as the titre is less than 32”
- Routine screening regime, (4 week samples to 28 week then 2 week to term)
- Titre stayed at 8

- 38/40 weeks patient admitted in late stage labour
- Delivered in 17 mins from admission!!!
- Unexpected Stillborn
- Noticed in review of case the issues related to anaemia not related to titre for Anti K
- PM showed not Hydrops, so anti K not implicated

Actions for future Anti Kell

- Now ensure early referral to foetal medicine unit for all anti K mums – irrespective of titre
- Contacted NBS Leeds and discussed ambiguous wording on report;
- Contacted NBS national group to review wording on report have agreed ….. But still waiting

Case 2.

Missing Kpa antibody

- Patient previous pregnancy showed anti Kpa high titre (128)
- Partner tested and Kpa–ve therefore no intervention required on foetal medicine unit instructions
- Healthy baby born
- This pregnancy no antibody detected on booking but not followed SOP by performing a full panel by lab staff

- Next sample showed anti Kpa, sent off for titre and high level again
- Obstetrician quizzed me re ‘if anti Kpa is background and not related to baby then why is antibody fluctuating?
- I didn’t know
- D/W NBS reference lab in Sheffield
- Asked us to review the screening panel on booking and panel has no Kpa antigen

- D/W everybody I can think of!!! (SHOT. Consultants at NBS and BCSH writing group and read loads)
- Outcome is; Screening cells do not need to have Kpa on them because
  - 98-99% are Kpa –ve therefore
  - Very rare to be of clinical significance for transfusion or pregnancy
  - One paper citing severe HDN with previous miscarriages
  - Only causes mild to moderate haemolysis in transfusion which can be detected during Xmatch.
  - However, advice is, if it *is* detected then need to screen as with other antibodies

Food for thought

- My worry is we could have a woman with increasing titres of anti Kpa without being aware of it – rare or not!
- ⊟ would not detect anti Kpa unlike Xmatch
- Following review of the paper, we will do a full panel on women with multiple miscarriages (but only if we know of them of course)
- Lab staff are now all aware of performing a full panel if antibody disappears, especially Kpa!

Thank you for listening

- Any questions