Immunisations; questions I get

1. Who comes to our outpatients clinic
2. Immunocompromised and immunisations
3. Exposure to vaccine preventable disease
4. Do we still see …meningococcal, pneumococcal
5. Questions about the new vaccines..
Clinic

- Egg allergy for influenza vaccination
  - Not egg allergy for MMR
- Previous immunisation adverse events for subsequent immunisation
  - Very, very low rate of anaphylaxis
- Undecided immunisers or want to discuss vaccines
  - Actual conscientious objectors (est 5% of population and infrequent clinic attenders)
Oncology and immunisations

• Defer immunisations whilst on chemotherapy (except influenza vaccine)
  – Until 6 months after chemotherapy completed
  – Or 12 months post BMT
  – Plus at least 2 yrs after HSCT for live viral vaccines

• Check of baseline titres of VPD (VZV/measles/mumps/rubella/Hep B/diphtheria/tetanus/Hib)
  – Then reimmunise based on protocol
  • Additional vaccines often offered

https://www.starship.org.nz/for-health-professionals/clinical-guidelines/alphafilter/
http://adhbintranet/SSHOncology/SSH Protocols Medical/SSH Protocols Local/localprot.htm
Check list before re-commencing immunisations

<table>
<thead>
<tr>
<th>Condition</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>Off therapy</td>
<td>At least &gt;6 months (or 12mths for HSCT)</td>
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<tr>
<td>Lymphocyte count</td>
<td>&gt;1.0</td>
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<tr>
<td>CD4</td>
<td>&gt;400</td>
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<tr>
<td>IgM recovery</td>
<td>To normal</td>
</tr>
<tr>
<td>Steroids ceased</td>
<td>&gt;4 weeks</td>
</tr>
<tr>
<td>Cyclosporin ceased</td>
<td>&gt;4 weeks</td>
</tr>
<tr>
<td>GVHD controlled</td>
<td></td>
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</tbody>
</table>
• 3 week old baby with cough comes to see you – maybe turned blue
• Mother has had cough for about 2 week

Questions
What do you do now?
Management

• Recent possible story of apnoea, young age – refer to hospital
• Notify Public health of suspected case
• Treat mother and prophylax contacts
  – Azithromycin syrup now available for any under 1yr
• Mother coughed a lot whilst she was in clinic rooms
  – Have you had Boostrix on last 10 years?
Pertussis - this year’s measles

Figure 1: Number of pertussis notifications by week reported 2010 - 2012
6 yr old with varicella in waiting room

• 18 yr old ‘receptionist’ on work experience tells you after that she is pregnant and she is not sure she has ever had chicken pox

• What should you do?
• Get her to ask her mum
  – Clear history of disease is sensitive predictor of immunity
    • Even then 2/3rds of adults with no past history of chicken pox are immune so do serology

• Urgent serology – varicella IgG positive
  – By age 14 yrs < 10% still susceptible
• In the waiting room were also
  – 2 week old new born baby
  – 38 week pregnant woman
  – Child with nephrotic syndrome on daily low dose steroids
• What do you do?
• What is exposure
  – Face to face contact (playmate) with active case of chicken pox for at least 5 minutes or close contact 1 hour (same room)

Post-exposure prophylaxis for immune competent person aged > 9 mths with vaccine

If exposed to chicken pox,
– Giving vaccine within 3 days
  May effectively prevent chicken pox

Giving vaccine within 5 days
  Lessens severity of illness

MMWR 1999
New Zealand Immunisation Handbook 2006
Invasive pneumococcal disease – vaccine serotypes reduction

Conjugate pneumococcal vaccine

Overall 70% reduction from 100/100,000 to 30/100,000 in under 2yr olds

Meningococcal disease

119 cases in 2011, ADHB and WDHB lowest in the country

1/3 strain epidemic, 1/3 other grp B and 1/3 grp C – C fatality rate highest
The new vaccines

- Rotarix
  - How long does protection last?
  - Can it be given to older infants?

- Varicella
  - How long does it last
  - Do we need 2 doses?

- HPV
  - 11 yr old girl on steroids for JRA; can she have the HPV vaccine?