

Well that doesn't sound right!

A story about a post-vaccination reaction

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Influenza Vaccination 2017

- Seasonal Influenza Vaccination is a well established part of the Healthcare worker calendar, with annual campaigns striving to vaccinate as many staff as possible. Published risks for post vaccination reactions are very low. Most reactions are relatively mild and transient: pain and/or redness at site, fever, myalgia. Anaphylaxis is very rare: *(WHO)**
- The facility usually vaccinates between 1200 and 1400 staff annually. There had been NO previous serious adverse reactions reported.
- The facility has a well established pre-vaccination screening process.
- Vaccination in 2017 was undertaken with Quadrivalent inactivated influenza vaccine (QIV) sourced through the State Central Pharmacy.

Event

- ✓ Prior to vaccination, the staff member raised the question “will last year’s hoarse voice stop me from being vaccinated?”
- ✓ A discussion was undertaken with the ID Physician regarding the dysphonia and other allergy history. The reported dysphonia was thought to be coincidental or attributable to a mild viral illness that was present around time of previous vaccination.
- ✓ Risks and benefits discussed. Planned vaccination time arranged.
- ✓ Vaccination given, observation period commenced.
- ✓ Within 4 minutes there was a **distinct change** in vocal quality – raspy, hoarse and harsh pitch
- ✓ Coughing started very soon after.
- ✓ Relocated to Department of Emergency Medicine with rapid decline in clinical symptoms. I.e: coughing, difficulty breathing, facial redness, tachycardia and feeling of impending doom.
- ✓ Management initiated with IMI and nebulised adrenaline, steroids and antihistamines

NOTE: There was no obvious facial or oro-pharyngeal oedema.

*World Health Organisation (Producer). (2012) World Health Organisation: Information Sheet Observed rate of Vaccine reactions Influenza Vaccine. Retrieved from http://www.who.int/vaccine_safety/initiative/tools/Influenza_Vaccine_rates_information_sheet.pdf?ua=1



Sequelae

- Since the initial event there have been a further two reactions to egg exposure experienced by this individual requiring emergency intervention.
- There was NO previous reaction to egg prior to the 2017 Quadrivalent influenza vaccination (QIV)
- Immunologist review- “atypical reaction” – scheduled for an egg challenge test
- Reporting through state and national bodies of the AEFI. Internal and External program reviews concluded there was no failures in the process.

Dysphonia

- Characterised by hoarseness or change of vocal pitch
- Dysphonia can be caused by immunisation but it is rarely described in the literature as an adverse reaction

Case History

- 51 year old female Oncology Nurse:
 - Only previous allergies are to products from the Birch family, which caused hayfever like symptoms (*oral Allergy syndrome*) which started in 1995 during pregnancy. (*Thought to be related to hormonal fluctuations at the time*).
 - I have had flu vaccines every year for the last 15years without issue 2016 QIV – light tickle in my throat and approximately 15 minutes later had dysphonia. This was not thought to be related to the vaccine and resolved in a couple of days without further incident. (*Thought at the time of administration to be indirectly related*).
 - Previous sensitivity to stone fruit and pineapple.
 - **NO KNOWN ALLERGY TO EGG OR EGG PRODUCTS.**

Lessons Learned

- Dysphonia, voice changes, tickly cough – even without the presence of other more classic signs of an allergic reaction MAY be an early sign of hypersensitivity.
- Pre-vaccination screening should include a question regarding “atypical symptoms” (*in plain language – “had anything funny or unusual after any of your previous jabs?”*)
- ENFORCEMENT** of post vaccination observation periods.

What now?

- NO MORE SEASONAL INFLUENZA VACCINATIONS FOR THIS STAFF MEMBER.**