



## **Scientific Committee on Vaccine Preventable Diseases**

### **Statement from the Working Group on Influenza Vaccination under the Scientific Committee on Vaccine Preventable Diseases on two patients with history of influenza vaccination**

#### **Case 1: 37-year-old female nurse in QEH with encephalitis**

The diagnosis was immune-mediated encephalitis. This case showed a temporal relation with influenza vaccination, with onset of mild neurological symptoms resolving spontaneously 1 week following vaccination, and neck pain, fever, blurred vision and involuntary upper limb movement 3 weeks after vaccination. The Working Group also noted another case report of encephalitis following influenza vaccination reported in PMH in 2003. On the other hand, other causes of encephalitis in this patient cannot be excluded. The patient had a febrile illness presumably infectious in origin 10 days prior to onset of severe neurological symptoms, although virological and serological tests failed to identify an etiologic agent. The World Health Organization has not considered encephalitis a sequelae of influenza vaccine. In view of the background incidence of encephalitis in the local community, the occurrence of one case of encephalitis following influenza vaccine per year is statistically non-significant. While it is difficult to prove or disprove influenza vaccination as causing this patient's illness, the Working Group opines that a causal relationship between encephalitis and influenza vaccination in general cannot be established on the basis of current evidence.

#### **Case 2: A 26-year-old female teacher reported by PWH**

The diagnosis was suspected Guillain-Barre Syndrome (GBS). The Working Group opines that further tests (e.g. nerve conduction test)



repeated over the next few weeks will be useful to confirm the diagnosis of GBS. This case showed a temporal relation with influenza vaccination, with sudden onset of weakness and numbness about 3 weeks following vaccination. However, the patient also had symptoms of upper respiratory tract infection 1-2 weeks before onset which might serve as the triggering event (two-thirds of GBS patients report antecedent infectious illnesses). Previous studies reviewed by the WHO found the excess risk of GBS associated with subsequent influenza vaccines ranges from small to non-existent. Even if GBS is a true side effect of influenza vaccine, the estimated risk is 1-2 cases per million vaccinated persons. In view of the background incidence of GBS in the local community, the occurrence of one case of GBS following influenza vaccine per year is statistically non-significant. While it is difficult to prove or disprove influenza vaccination as causing this patient's illness, the Working Group concurs with WHO's assessment and opines that this case alone does not prove a general causal relationship between GBS and influenza vaccination.

Centre for Health Protection  
December 2005

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