

**Minutes of the  
Adverse Drug Reactions  
Advisory Committee**

**313<sup>th</sup> meeting**

**13 February 2009**

10.3.1.3 <i>Retro bulbar neuritis and HPV vaccine .....</i>	64
10.3.1.4 <i>Muscle weakness, hyperreflexia, paraesthesia and HPV vaccine .....</i>	65
10.3.1.5 <i>Demyelination and HPV vaccine .....</i>	65

## **10.1 Vaccine issues and published articles**

The following were noted for information.

- Liew Woei Kang, Nigel Crawford, Mimi L K Tang, Jim Buttery, Jenny Royle, Michael Gold, Christine Ziegler, Patrick Quinn, Sonja Elia and Sharon Choo. Hypersensitivity reactions to human papillomavirus vaccine in Australian schoolgirls: retrospective cohort study. *BMJ* Dec 2008; 337; a2642
- US Centre for Disease Control Reports of Health Concerns Following HPV Vaccination [to August 2008]
- Smith J *et al.* Immunization Policy Development in the United States: The Role of the Advisory Committee on Immunization Practices. *Ann Intern Med.* Jan 2009; 150: 45-49.
- Sutton I *et al.* CNS demyelination and quadrivalent HPV vaccination. *Multiple Sclerosis* Jan 2009; 206 15: 116-119.

[Note: The cases cited in this paper and a prepublication copy of the paper were previously discussed by ADRAC, at the 309<sup>th</sup> (July 08) Meeting].

## **10.2 Vaccine reports**

During the period from 02 November 2008 to 04 January 2009, 210 reports of vaccine adverse reactions were lodged. This represents about 16.6% of the reports lodged for the period. All case

reports for vaccines received during the period covered by the present Meeting were provided to the Committee.

#### ***Reports of vaccines other than HPV vaccine***

161 of the vaccine reports describe reactions to vaccines other than single-injection HPV vaccine (4 of these describe reactions to HPV vaccine plus hepatitis B vaccine).

130 of the reports were received from States, Territories or Local Government Councils, 21 were from health professionals, 9 were from sponsors; and 1 was from the AMEL. About 137 reports related to children, 23 related to adults and age was not stated in the remaining.

#### ***HPV vaccine reports:***

49 of the vaccine reports described reactions to HPV vaccine when given as a single vaccine. The reports were received from NSW (10), VIC (8), QLD (18, including 2 from the AME Line), SA (4), WA (2), ACT (2), NT (3) and TAS (2).

#### **Number of reports and events**

The number of reports received in association with the majority of the vaccines is shown below:

Vaccine	No. reports	Vaccine	No. reports
		Human papilloma virus	49

## ***Anaphylaxis***

Report 246679

This report had been coded as 'anaphylaxis': it involved a 15 year old female who received her 3<sup>rd</sup> HPV dose (in a GP clinic). She developed symptoms (lump in throat, swelling of tongue, nausea) 5 mins after vaccination. She did not experience breathing difficulties but was given adrenaline and prednisone within 10 min of receiving the vaccine. She developed an itchy eye but no blood pressure changes and was taken to hospital where antihistamines were also given for on-going facial swelling.

Members commented that this case could not be classified as 'anaphylaxis' on the basis of reported signs and symptoms. In particular, no breathing difficulties or cardiovascular symptoms had been experienced. It was impossible to know if the reaction would have evolved into anaphylaxis as adrenaline had been administered (appropriately) at the onset of symptoms. **ADRAC requested that anaphylaxis be removed from the coding of this report.**

Summarised details of other specific reactions associated with vaccines are shown in the following Tables:

Seizures/convulsions (5 reports)						
Note: onset time (if stated on report) is in days; an onset time of 0 indicates the reaction occurred on the day of vaccination						
Case Number	Sex	Age	Onset Time	Outcome Description	Reactions	Vaccine/s
246269	F	12		Unknown	Convulsion, headache, local reaction	Gardasil

**Other serious neurological cases (9 reports)**

<b>Case Number</b>	<b>Sex</b>	<b>Age</b>	<b>Onset Time</b>	<b>Outcome</b>	<b>Reactions</b>	<b>Trade Name Description</b>
--------------------	------------	------------	-------------------	----------------	------------------	-------------------------------

	246157	F	15	1	Recovered	Hyperreflexia Muscular weakness Paraesthesia	Gardasil	
--	--------	---	----	---	-----------	--	----------	--

	246547	F	23	15	Unknown	Demyelination	Human Papillomavirus Recombinant Vaccine	
--	--------	---	----	----	---------	---------------	---	--

	246613	F	25		Recovered	Bradypnoea Loss of consciousness	Gardasil	
--	--------	---	----	--	-----------	-------------------------------------	----------	--

### **10.3.1.3 Retro bulbar neuritis and HPV vaccine**

This report from a specialist described the development of retro-bulbar neuritis (right vision foggy, sharp pain in right eye and colours appearing different in each eye) in a 22 year old female who had received HPV vaccine. The dates for drug administration were given as April (date drug began) and August (date drug was halted), while the onset of the reaction was given as October.

Presumably, the girl had received more than one HPV dose over this period, but the timing of the reaction relative to HPV dose/s was not clear.

#### **10.3.1.4 Muscle weakness, hyperreflexia, paraesthesia and HPV vaccine**

A 15 year old girl developed weakness in her feet 24 h after receiving her 3rd dose of HPV vaccine. The following day (2 days following vaccination) she received a cortisone injection into a knee to treat pre-existing, recurrent dislocation. On day 4-5 after vaccination, the girl experienced bilateral weakness of the knees, ascending weakness and tingling in upper extremities and she was admitted to hospital with suspected Guillain Barre Syndrome. It is not clear if GBS was subsequently confirmed. An update on the girl's condition 1 month later indicated that symptoms were resolving but she remained in hospital and was not weight-bearing.

#### **10.3.1.5 Demyelination and HPV vaccine**

Fifteen days after HPV vaccination, a 24 year old female developed symptoms "of a multiple sclerosis-like relapse". The case was described as "sensory tingling in both feet, which ascended to the base of her neck over about 24 hrs. An MRI scan showed a number of subcortical lesions consistent with demyelination. This was the [patient's] first demyelinating event."

Members expected that this report, together with others describing events of demyelination following HPV vaccine, would be extensively investigated by the Gardasil Expert Panel (GEP). It was anticipated that the GEP would issue a report of its findings in due course. A Member commented that it was difficult to draw conclusions regarding an association between HPV vaccine and neurological events at this stage. Interestingly the FDA had recently issued the results of investigations that showed the rate of neurological reactions in females vaccinated with HPV vaccine was similar to the background rate of these events in that population.

A collection of newspaper clippings on the following subjects was noted for information:

- HPV vaccine