What Comes Next

What options do you have if you think you've exposed yourself to risk of HIV infection?

Chances are that many people reading this will be hearing about HIV post exposure prophylaxis (PEP) for the first time. Recent informed speculation suggests that if you are a gay man in southern Queensland there is an eight in ten chance that you have never heard about PEP.

So, what is it?
In an attempt to prevent infection with HIV PEP is giving someone generally two or three HIV antiviral drugs, for a period of four weeks, following a potential exposure to HIV. A potential exposure would include a needle stick injury, sharing injecting equipment or having unprotected sex with a HIV positive person. PEP for 'occupational exposure' has been widely used in the case of health care workers who may have been exposed to HIV through needle stick injuries in their work. In December 1998, PEP became available in NSW for 'non occupational exposures' such as unprotected sex with someone who is HIV positive. Since then Queensland, ACT and Victoria have followed suit. At the time of writing, Austria, France, Germany, Luxembourg, Switzerland and Portugal have guidelines for the use of PEP in some cases of non-occupational exposures. It is also available in the US state of Massachusetts and as part of a trial in San Francisco. The Pharmaceutical Benefits Scheme does not cover the cost of these HIV antiviral drugs used for PEP. In certain circumstances the State government, not the Commonwealth, will meet the cost. In Queensland the money comes out of a special budget established by Queensland Health.

How does it work?
It can take a few days from the time of exposure to HIV for the virus to become established in the body. During this period it may be possible for the amount of HIV in the body (viral load) to be controlled by your immune system. Antiviral therapy given at this time may help to reduce or even halt the replication of the virus to a level that is manageable for the immune system's defences. The cells originally infected would then die naturally within a short period of time, without having produced more copies of HIV. If the virus can be prevented from spreading to a larger number of cells then long-term infection may be avoided. For PEP to work it should be started as soon as possible – within a few hours, and no more than 72 hours after exposure.

Is it Effective?
A San Francisco trial of PEP reported that, at 12 months follow-up, three out of 401 participants had become HIV positive. However, none of these seroconversion were related to the presenting exposures. In NSW it has been a similar story with only one seroconversion reported among the 290 who have been followed-up. This seroconversion was related to ongoing high-risk behaviour rather than the incident that led to PEP. If PEP fails it is probably due to one of four factors:

- The initial viral load was too great.
- The rate of viral replication was too great for the immune system to control or halt.
- The strain of virus was resistant to the medication.
- The immune system was impaired.

When do I seek PEP?
When determining the risk of HIV transmission the two important factors are:

- the likelihood that your sexual partner was HIV positive; and
- the type of exposure.

Even if your partner is HIV positive, there are varying levels of risk of HIV transmission based on the types of exposure. These range from insertive anal sex at less than 0.1 per cent to receptive anal sex at 3 percent. Oral sex is considered very low risk and is not generally a reason to seek PEP unless there is ejaculation into your mouth when you have ulcers, bleeding gums or have had recent dental surgery.

Side Effects
The drugs used for PEP are the same as those used to treat HIV infection. They are also prescribed at the same dose. In the NSW study, over two-thirds of those who have taken PEP have experienced some mild to moderate side effects like nausea and diarrhoea. There were two cases of serious side effects. Those on PEP experience a higher prevalence of side effects than those taking the same drugs for established infection (around 70 percent compared to 54.8 percent). This may be because side effects are commonly experienced during the early period of treatment. The higher rate of PEP side effects may be comparable to that experienced by people with HIV during their first month of treatment.

Drug interactions
Some of the antiviral drugs used for PEP are known to cause interactions with other drugs. The protease inhibitor class of drugs, particularly ritonavir (Norvir), is known to affect the way the liver processes some other drugs. As a result, the blood levels of ecstasy (MDMA), amphetamines, methadone, Valium, Rohypnol, anabolic steroids, ketamine (Special K) and Viagra can be greatly increased, with dangerous consequences. It is important to discuss with your doctor any other drugs (prescription or non-prescription) that you are taking, or intend to take.

Why the silence up until now?
There has been some anxiety about promoting PEP for possible sexual exposure on the part of governments (because of funding implications), the medical profession (because PEP is still considered 'unproven' in the absence of data from randomised trials) and educators and policy makers (because of fears that this treatment would be commonly and repeatedly used as a so-called 'morning after pill') The fear that knowledge of PEP would undermine the 'safe sex culture' among gay men has not been borne out. In fact all the evidence so far has been to the contrary. The San Francisco study found that, 72 per cent of those who had presented for PEP showed a decrease in high-risk behaviour for HIV, compared to 14 per cent who had no change and 14 per cent who showed an increase. Both the San Francisco and Sydney studies also found that knowing about the availability of PEP did not make people any more likely to engage in high risk behaviour. PEP is not likely to be as important for those gay men who have repeated incidents of unprotected sex in ways they perceive to reduce the risk of HIV infection, such as using the viral load (of an HIV-positive sexual partner) to make decisions about condom use. When these people are having unprotected sex they think they are at little risk of HIV anyway so they will not rush off to get PEP after. It seems that PEP is valuable for the majority of gay men who have one-off events of high-risk behaviour (or condom breakage).

Where do you get it?
National guidelines for the administration of PEP have now been finalised. During business hours PEP is available from Kobi House at Toowoomba hospital, the Infectious Diseases Clinics of the Alfred and Royal Melbourne hospitals and after hours from the Accident and Emergency Department of hospitals at Ipswich Logan Toowoomba Gold Coast, South Brisbane (Princess Alexandra and QE11) Wynnum and Beenleigh.

Adapted from an article by Dean Murphy - Lifeblood – Victorian AIDS Council