CATIE-News

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Study finds antidepressants not linked to cancer but...

9 June 2008

Depression is a common problem in people who have HIV/AIDS and in some people who are at risk for getting it. If left untreated, depression is associated with reduced quality of life, illness and even death in people with HIV/AIDS.

Although antidepressants can be effective in providing relief, some research suggests the possibility that this group of drugs has the potential to increase cancer risk. It is not clear how antidepressants might do this. Large studies to explore the cancer-causing potential of these drugs have produced conflicting results.

HIV positive people are at increased risk for cancers due to their weakened immune system. Also, many HIV positive people are co-infected with sexually transmitted viruses that have the potential to cause cancer, such as:

- HPV (human papilloma virus) – linked to cancer of the anus, cervix and penis
- HHV-8 (human herpes virus-8) – linked to KS (Kaposi’s sarcoma)
- EBV (Epstein-Barr virus) – linked to NHL (non-Hodgkin’s lymphoma)

To find out if the use of antidepressants was associated with an increased risk of cancer, researchers in London, England, conducted a review of their large database. Their findings suggest that antidepressants are not linked to the development of cancer in HIV positive people. However, the British team raises concern about the sleeping agent zopiclone and a potential link to cancer.

Study details

The research team reviewed health-related information collected between 1986 and 2007 on 10,997 HIV positive patients whose average profile was as follows:

- 11% female, 89% male
- 67% were White
- 9% were Black
- 24% from other ethnico-racial groups
- CD4+ count – about 320 cells

The study team assessed a broad range of antidepressants, from older tricyclic drugs (including imipramine and amitriptyline) to a more commonly used class today called SSRIs (selective serotonin reuptake inhibitors)—including Prozac (fluoxetine), Paxil (paroxetine) and Celexa (citalopram)—as well as other antidepressants.

During the study period, the number of people exposed to these classes was as follows:

- tricyclics – 919 people
- SSRIs – 952 people
- other antidepressants – 133 people

Results—Good news

A total of 144 cases of cancer occurred among participants after antidepressants had been prescribed. However, no one class of antidepressant or any individual antidepressants were linked to the development of cancer either before or after the introduction of highly active antiretroviral therapy (HAART).
The only factor linked to the development of cancer was having a low CD4+ count (less than 150 cells).

Unfortunately, the study team was unable to take other factors into account—such as tobacco use, obesity and dietary habits—when calculating cancer risk.

Nonetheless, these findings should reassure HIV positive people and their physicians about the lack of cancer risk with antidepressants.

In addition to relieving feelings of sadness and other symptoms of depressive illness, the use of antidepressants has been shown to improve adherence to HAART.

**Is caution with Z drugs needed?**

From time to time, some people have difficulty falling asleep or staying asleep. In some cases these problems may be the initial symptoms of more serious issues, such as anxiety or depression.

So-called Z drugs are commonly used for the treatment of short-term sleeping disorders. This group of drugs includes the following:

- zopiclone (Imovane, Rhovane, Zimovane, Zopicalm)
- eszopiclone (Lunesta)
- zolpidem (Ambien)
- zalepon (Sonata)

Laboratory experiments with animals suggest that zopiclone and eszopiclone can cause cancer when given at higher-than-normal doses. Precisely how these drugs caused cancer in these experiments is not clear.

Concerned for their patients’ safety, a British research team studied the same database used for the antidepressant study, focusing on the use of zopiclone and the development of cancer.

They found that 32 people (or 5% of 606 people) prescribed zopiclone by hospital pharmacies for at least two weeks went on to develop cancer after at least three months. The types of cancers that occurred were as follows:

- KS (Kaposi’s sarcoma) – 19 cases
- Hodgkin’s lymphoma – 10 cases
- brain cancer – 1 case
- invasive anal cancer – 1 case
- lung cancer – 1 case

These findings do not prove that zopiclone causes cancer.

Note that the study only assessed zopiclone use when it was prescribed by a hospital pharmacy. This sleeping pill is commonly prescribed by family doctors, but the hospital database did not keep track of this. So it is possible that the present study underestimates the number of people using zopiclone and the cases of cancer possibly linked to its use.

The study team suggests that controlled studies be conducted to explore the possible association between the use of zopiclone and subsequent development of cancer. This task is important given the weakened immunity associated with HIV infection.

—Sean R. Hosein

**REFERENCES:**


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Production of this content has been made possible through a financial contribution from the Public Health Agency of Canada.

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