News about Zithromax not so arresting

By ACSH Staff — May 18, 2012

It seems that the widely prescribed antibiotic azithromycin (sold as Zithromax in Z-Paks) may slightly increase the risk of sudden cardiac death when compared to no antibiotic treatment, according to a study just published in the *New England Journal of Medicine*. Given that the antibiotic is prescribed to treat a range of bacterial infections, from bronchitis and earaches to some sexually transmitted diseases, the study results are attracting attention despite the fact that the small overall risk should be no real cause for concern.

Researchers at Vanderbilt University analyzed the records of adult Tennessee Medicaid patients, looking specifically at deaths in patients given azithromycin between 1992 and 2006. After the research team compared that rate with a control group given no antibiotics, as well as with other groups who had received several other types of antibiotics, the data revealed the small risk associated with azithromycin. Over a five-day course of treatment, azithromycin was associated with an estimated 47 additional cardiovascular deaths per million patients, compared to the group taking no antibiotics at all.

It is, however, important to keep in mind that these results, while statically significant, represent a very small increase in actual risk. As ACSH's Dr. Gilbert Ross points out, "Even among the highest-risk group of patients, the risk of cardiac death associated with azithromycin is still minuscule." Furthermore, the researchers acknowledge that there are several confounding factors that may have affected the results of their study, such as patients' underlying cardiovascular disease and behavioral risk factors such as diet and smoking, as well as the direct effect of patients' infections. While the researchers aimed to control for these confounders, they remain problematic.

ACSH's Dr. Josh Bloom thinks this is much ado about nothing. There is a slight risk of cardiac toxicity with this entire class of drugs (called macrolides), he says. It would be surprising if azithromycin didn't behave like the others.

So how should doctors and patients respond to these findings? "I wouldn't even mention this risk to a patient if I were prescribing," says Dr. Ross. "That's how minute it is. Nevertheless, these numbers are worth being aware of if for no other reason then that they should serve as a reminder to doctors to limit the prescription of antibiotics indeed, all drugs to specific indications."