THURSDAY / JANUARY 25, 2018
WWW.INQUIRER.NET

A11

Dengvaxia: the facts (1)

BY: PETER WALLACE

Let's stop the hysteria and start with a basic fact: Dengvaxia works. It's a remarkable vaccine that greatly reduces the chance of suffering from a severe case of dengue. A trial was conducted involving 30,000 people, including in the Philippines. In the five years after the trial, the chance of suffering from severe dengue was reduced by 93 percent; the overall reduction was 65 percent.

And for the opportunistic lawyers, Dengvaxia doesn't cause dengue; it just, in the rare worst case, means that a seronegative person may suffer as much as a seropositive person who had not been vaccinated. If a society where the risk of dengue is high, like the Philippines, is not inoculated, 4.8 per 1,000 people are likely to suffer from a severe case. A fraction will die; the others will recover.

The present controversy concerns the impact of a mosquito bite causing dengue in someone who'd been inoculated with Dengvaxia but not previously had dengue (seronegative). Among those who have had dengue (seropositive), there was a reduction of about four cases of severe dengue per 1,000 persons vaccinated. In seronegative people, there is higher risk of hospitalization from dengue and severe dengue (DHF grade I and II). These are the same symptoms an unvaccinated seropositive person would suffer if bitten a second time. The number remains much the same. Some 4/1,000 may suffer a severe case. This is about the same risk level as in people who had dengue in the past but are not vaccinated—4 versus 4.8 per 1,000.

These facts were gleaned from the trial of 30,000 persons. None of those who suffered died. So we have to be a little cautious in ascribing the recent deaths of some kids who'd been inoculated to a sufficient worsening of the disease as to cause deaths. They may well have died with or without Dengvaxia, whose safety and efficacy have been proven in large-scale clinical trials and is working seemingly without problems in Brazil, where a similar program is being conducted. It has been licensed in 19 countries and is commercially available in 11 of these countries.

About half of the 830,000 kids inoculated here have had the necessary three injections; overall, they are no longer likely to suffer severely from dengue (the 93 percent success rate). The other half with only one or two injections, and other kids in the country, are still susceptible to the possibility (4.8 in 1,000) of a severe case of dengue.

For me the problem isn't the vaccine but the speed and manner in which it was introduced. One has to ask why a government noted for its lethargy rushed to sign a contract. Why was it given more importance than other equally, or more, necessary health spends? And why wasn't greater care taken to check if the kids had had dengue? At the time there was no proof that Dengvaxia would increase the chance of severe dengue in seronegative kids. But there was some suspicion it could, so a cautious approach would have been sensible.

It was only recently that Sanofi-Pasteur, after further tests, confirmed that seronegative people could be at higher risk, so should probably not be inoculated. It informed the Department of Health of this finding—a responsible act, in my view. That's when the sh*t hit the fan. There was knee-jerk overreaction to the notice.

These facts and much of next week's column are paraphrased from a World Health Organization document released in April 2016 and published in July. The WHO has no political agenda to promote, or money to make. It is composed of independent experts who know what they're doing.

WHO recommended inoculating a populace if the prevalence of dengue infection was over 70 percent. It was 85 percent in the areas vaccinated here. It also said the vaccine should not be given to children under the age of 9, and it wasn't. The regulatory three doses were given to about half the kids; the other half had only one or two of the injections.

WHO did mention a possible worse reaction in seronegative persons, but there were no empirical data to back this. Further research was suggested. Sanofi complied, with the assistance of a new assay method codeveloped with the University of Pittsburg, which led to this notice. So whatever you think of the speed of Aquino and Garin, they were following the guidelines. Was it a higher priority than spending on other illnesses?

That's a judgment call. Were there questionable transactions? I leave that to Senators Dick Gordon and JV Ejercito to ferret out. But it's a side issue (an important one) to the efficacy of the drug, which is my focus here.

E-mail: wallace_likeitis@wbf.ph. Read my previous columns: www.wallacebusinessforum.com.

+ VACCINATION - DENGVAXIA