Unfortunately, though, the document is already somewhat out of date. Most of the data cited in it were published prior to 2004.

One important change that has occurred since then is the resurgence of difficult-to-treat ear infections in children due to multidrug-resistant Streptococcus pneumoniae. We’ve had 4 or 5 years following the introduction of Prevnar when the rate of those infections were plummeting. Now, however, we’re increasingly seeing cases of otitis media caused by the pneumococcal serotype 19A, a particularly nasty clonal strain that is resistant to amoxicillin, amoxicillin-clavulanate, and all the cephalosporins including intramuscular ceftriaxone.

In our practice, these children are re-lapping even after tympanocentesis and following tube placement. The ear just keeps draining.

I suggest that this is an appropriate indication for a quinoine.

Such a scenario isn’t spelled out in the AAP statement, but recurrent otitis media due to pneumococcal serotype 19A certainly does qualify under the general heading of a ‘multidrug-resistant pathogen for which there is no safe and effective alternative.’

I think we can lay to rest the safety concerns regarding several of the fluoroquinolones in children.

In 2005, my colleagues and I published an article in which we summarized the available data on the use of gatifloxacin in children with recurrent ear infections and ear infection treatment failure (CID 2005;41:470-8).

The database wasn’t huge—a total of 867 children aged younger than 2 years from four clinical trials—but it was very reassuring in that during a full year of follow-up, we found no evidence of arthrotoxicity, neurotoxicity, or central nervous system toxicity, nor were there the alterations in glucose homeostasis that had occurred in adults.

Earlier this year, gatifloxacin was pulled from the market worldwide because of glucose homeostasis concerns in adults.

Prior to that, Bristol-Myers Squibb had withdrawn its application for a pediatric indication for the agent because it couldn’t come to an agreement with the Food and Drug Administration about how to limit prescription (CID 2005;41:1824-5).

I think we can extrapolate the safety data on gatifloxacin to other fluoroquinolones, with some caution.

I believe we have enough data on ciprofloxacin and levofloxacin to support their use in children.

The only other major systemic fluoroquinolone, moxifloxacin, is probably okay, but I’d hesitate to endorse its use in children because there are no data—and it doesn’t come in a liquid formulation, so it’s very difficult to give to a young child.

Of course, resistance remains a major concern.

We must continue to be vigilant in reaching for the more narrow-spectrum drugs first, and only advance to more potent agents as the clinical situation demands.

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