A defense of apple pie

These are interesting and somewhat confusing times for vaccines. There is new appreciation for the need to revaccinate against pertussis. There is concern over the lack of an effective vaccine for avian flu and various agents of bioterrorism. And there is active debate over the appropriate use of vaccines potentially effective at preventing sequelae of viral infection, including shingles and cervical cancer.

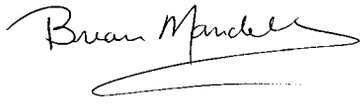
Often unremarked upon is the pneumococcal vaccine, often seen as sacrosanct as motherhood and apple pie. The vaccine has been largely accepted by the medical community, although by all accounting we underuse it compared with utilization targets proposed by various expert task forces. A reason for the low vaccination rate—although I do not believe it is the major reason—is a surprising dearth of hard data to support its efficacy.

On page 401 in this issue of the *Journal*, Targonski and Poland argue for vaccinating adults against *Streptococcus pneumoniae*, despite disparate data from clinical studies.

On the one hand, pneumococcal vaccination is notably safe and affordable, with an easily demonstrable immunologic effect against the most common agent of the disease that Sir William Osler described as "captain of the men of death."

Perhaps surprising to those of us not following this literature, however, is that the prospectively derived data do not strongly support the efficacy of this vaccine in preventing pneumococcal pneumonia or death. Several methodologic explanations for the disparity of the data have been proposed, with observational studies that do support its efficacy in decreasing invasive pneumococcal infections (studies have suggested that more than 30% of cases of pneumococcal pneumonia are associated with bacteremia).

As we are faced now with several new vaccination decisions, it seems timely to revisit one that we have long taken for granted.



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