Vaccination: An option not to be ignored

"Emerging" viral infections such as Ebola, Hantavirus, JC virus, and anthrax tend to attract attention. But reemerging infections once considered limited to children or virtually eradicated by vaccination programs also merit attention.

We have previously discussed in the *Journal* the recrudescence of pertussis in adults and the challenges to its diagnosis, which include the misperception that it is a rare disease. Adult pertussis infection is usually due to the waning effect of childhood vaccination, and in adults it is more often an extreme annoyance than a life-threatening illness.

In this issue, Dr. Camille Sabella² discusses measles, an infection thought to be all but eradicated in the United States by vaccination, predominantly using the live-attenuated measles virus contained in the measles-mumps-rubella (MMR) vaccine.

But measles outbreaks are seemingly on the rise, and because measles is extremely contagious, it poses a real risk to closed communities such as college dormitories, churches, and health care facilities. Measles infection can have significant adverse outcomes, particularly in immunosuppressed patients.

Although outbreaks have been attributed to virus imported from locations outside the United States, the spread of infection has been blamed on an increased number of unvaccinated children and adults. The reasons for decreased vaccination rates are many, and include parental fears that the vaccine will cause problems such as autism.

This autism link is a goblin that refuses to go away, despite strongly worded debunking by the US Centers for Disease Control and Prevention, the Institute of Medicine, and many peer-reviewed publications. The very recent retraction by the Lancet—based on ethical and nondisclosure concerns—of the 1998 paper by Wakefield et al⁵ (which suggested a link in 12 children between MMR vaccine and chronic gastrointestinal problems and autism spectrum disorders) may further diffuse this concern. But I fear it will not.

So at present, we should reeducate ourselves on the clinical features, natural history, and potential complications of this eradicable disease, particularly if we treat patients who work in closed communities or have defects in cellular immunity.

BRIAN F. MANDELL, MD, PhD Editor-in-Chief

REFERENCES

- 1. Sabella C. Pertussis: old foe, persistent problem. Cleve Clin J Med 2005; 72:601–608.
- 2. Sabella C. Measles: not just a childhood rash. Cleve Clin J Med 2010; 77:207–213.
- Board on Population Health and Public Health Practice, Institute of Medicine of the National Academies. Immunization safety review: vaccines and autism. http://www.iom.edu/Reports/2004/Immunization-Safety-Review-Vaccines-and-Autism.aspx. Accessed February 11, 2010.
- The Editors of The Lancet. Retraction—ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. Lancet (published online February 2, 2010) DOI:10.1016/S0140-6736(10)60175-4. Accessed February 11, 2010.
- 5. Wakefield AJ, Murch SH, Anthony A, et al. Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. Lancet 1998; 351:637–641.