

Infectious diseases in family life

Barry and Linda Fox

Madison, Wisc

Despite the well-known adage that it is unwise to treat one's own family, how many of us have awakened in the night to the crying of a child and pulled out the otoscope to look for a purulent otitis media? I must admit that, over the years, I have become proficient at examining my children's ears. And if I have begun amoxicillin in the middle of the night, I have also confessed my "sin" to the pediatrician the next day.

Tip of the iceberg

After the premature birth of our oldest daughter, Meghan, we learned firsthand about bacterial mastitis, which required antibiotics and forced my wife to give up breastfeeding. At age 2, our daughter challenged us with a bout of hemorrhagic cystitis. Fortunately, she did not have post-streptococcal glomerulonephritis. Since I was an infectious disease fellow at the time working in a cancer center research lab, we managed to culture adenovirus from her urine 2 weeks later.

At age 3, Meghan's experience in daycare included a bout of hand, foot, and mouth disease. At age 16, it was recurrent Group C streptococcal pharyngitis. The rapid streptococcal tests (which I had

collected at home) were repeatedly negative, but cultures showed the same Group C streptococcus 3 months later. A course of clindamycin and short course of rifampin eradicated the streptococci.

Also while in her teens, Meghan accepted an invitation to a forbidden hot-tub party when a friend's parents were away. Meghan later came to me with a nasty, rapidly spreading rash. When our middle daughter, Molly, exhibited the same rash on her torso after borrowing a tank top from her older sister, the "cat was out of the bag." After reassuring Meghan her hot-tub *Pseudomonas* folliculitis would go away on its own, vanity took over and she demanded antibiotics to make it disappear before the day of her school picture. Ciprofloxacin to the rescue again!

I admit to stockpiling ciprofloxacin in case my house is the target of an anthrax bioterrorism letter. I also have oseltamivir on hand for the first sign of influenza illness. I can't wait to stockpile pleconaril for the common cold. (All this while sincerely advocating the conservative use of antibiotics.)

Rest of the iceberg

My wife has had recurrent, purulent, acute exacerbations of chronic sinusitis. Sinus CT scans have been equivocal for surgery, and now after 5 days of an upper respiratory illness, she feels obliged to take a 5-day course of antibiotic prophylaxis with

Corresponding author: Barry C. Fox, MD, H4/572 CSC, 600 Highland Ave, Madison, WI 53792. E-mail: bcfox@facstaff.wisc.edu.

As bold as I was at looking in the children's ears, I tested a new career in body piercing as well

amoxicillin/clavulanate (which I do not advocate).

She has also endured occasional bacterial cystitis, and the rare yeast vaginitis resulting from the antibiotics she received.

With our middle daughter, Molly, Group A streptococcal pharyngitis seems to recur regularly before family gatherings, such as Thanksgiving.

When Meghan, who was 6 at the time, came down with spots on the day of our departure to Florida, the diagnosis was chickenpox. We had to postpone our vacation, not for 3 weeks but for 6, as Molly predictably came down with varicella on day 21 of the incubation period. Our youngest daughter, Lana, ultimately became the first varicella vaccine recipient in the State of Illinois, when it became available years later. Another vacation got off to the wrong start when the local club contaminated their Fourth of July banquet with a small round virus, sickening hundreds including our entire family.

Alternative medicine

As bold as I was at looking in the children's ears when they were younger, I tested a new career in body piercing as well. After going to the tattoo parlor with our oldest daughter, and observing the sterilization techniques (or lack thereof), I carefully supervised her piercing.

When the next daughter decided she wanted the same, I decided it would be safer to do it myself. Although piercing a belly button was an interesting experiment, piercing ears was much easier. Needless to say, I was also in charge of any swollen red area that might have suggested an early infection, and found a new potential commercial use for alcohol-based hand foams!

Preventative measures

I had just begun my tenure at a multispecialty clinic in Champaign, Illinois, when I helped lead

an investigation of invasive meningococcal infections in University of Illinois undergraduates. After witnessing first-hand the devastating effects of this disease, I insisted on inoculating my 3 children, although they were just teens. This was the beginning of my preventative family medicine undertakings.

My children and wife never wanted to get flu shots, even though each year they seemed to get influenza. I added that to my family ID responsibilities. This, however, backfired on one occasion with my youngest daughter, Lana, when she was 10. As the vaccine I had taken home was about to expire, I woke her in the morning with an alcohol wipe and needle, insisting she submit to vaccination. She reluctantly complied, but next went to the restroom. The next thing we heard was a thump as she fell off the toilet, with vagal syncope. I didn't earn many accolades from the family.

Role reversal

My wife had to take over my physician role one evening when I became ill with a viral intestinal illness that had me vomiting, discharging diarrhea, and sweating profusely. After seeing my eyes roll back in my head and watching me tumble off the toilet, my wife frantically dialed 911 and tried to recall her CPR training. I awoke to the paramedics standing over me in the bathroom. Naturally I refused their advice to go to the emergency department.

Lessons learned

Knowing my family is not that different from others, I am amazed at the multitude of infectious diseases an average family faces in daily living. The ways in which the average family does differ from mine is perhaps in the uncertainty and anxiety surrounding the beginning of disease, and in the steps to obtaining medical attention. My experiences have deepened my compassion for patients and have enriched my judgment in treating infectious diseases, thus leading, I trust, to a well-rounded approach to practicing medicine.