Acute Otitis Media

Acute otitis media (middle ear infection) is extremely common in children and also occurs in adults. In acute otitis media, infection occurs behind the tympanic membrane (eardrum). Acute otitis media is usually caused by bacteria. In some individuals, ear infections may occur again and again. Acute otitis media is an infection and is different than otitis media with effusion, the presence of fluid in the middle ear without infection. The November 17, 2010, issue of JAMA includes an article about diagnosis and treatment of acute otitis media.

SYMPTOMS

- Fever
- Ear pain, which may manifest as difficulty sleeping or poor eating
- Rubbing the ear by infants and toddlers
- Drainage from the ear

DIAGNOSIS

- Examination of the ear, called an otoscopic examination, is the most important test for diagnosis of an ear infection.
- The eardrum may bulge out, it is often reddened, and fluid can be seen behind the eardrum.
- If the eardrum has been perforated (has a hole in it), then the perforation can be seen. There may be evidence of drainage or crusting in the ear canal.
- Children who have environmental allergies, who are exposed to tobacco smoke, or who have eustachian tube dysfunction (the drainage passage from the middle ear to the back of the throat does not work properly) are more likely to have acute otitis media or effusion.

TREATMENT

More than 80% of ear infections can resolve on their own. Sometimes antibiotic treatment is necessary, especially if there is no improvement with a few days of watching an otherwise healthy child and providing pain relief with acetaminophen or ibuprofen. Infants younger than 6 months with an infection, however, should receive antibiotics without delay. Some children with special circumstances should be more aggressively treated. These conditions include congenital heart disease, cleft palate, Down syndrome, or immune system problems (such as leukemia, other cancers, or inherited disorders of the immune system). Children who have an episode of acute otitis media within 30 days of another episode usually require antibiotic treatment. Ear tubes are not the first-line treatment for acute otitis media, though they may be offered to individuals who have chronic middle ear fluid or chronic otitis media. Children with repeated ear infections are often referred to an otolaryngologist (a doctor with specialized education in the management and surgery of head and neck problems) for evaluation. Ongoing research may offer new recommendations for treatment of acute otitis media. Since the vaccine for Streptococcus pneumoniae (PCV) was introduced, other bacteria not covered by this vaccine are now more common causes of acute otitis media. Antibiotic resistance (when bacteria are no longer killed by certain antibiotics) also changes with time, and this may influence the choice of antibiotic treatment in the future.

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