Wait and See Prescription

A tool to reduce unnecessary use of antibiotics for acute otitis media

AWARE — Oregon Alliance Working for Antibiotic Resistance Education

Oregon Health Authority

The Wait and See Prescription (WASP) approach may reduce resistance to antibiotics, medical costs and adverse events due to the use of antibiotics, and improve family satisfaction by using a shared decision model.

Acute otitis media (AOM) is the most common diagnosis in children for which antibiotics are prescribed. Left untreated, AOM will resolve on its own in a majority of cases in children older than two years of age.[1] The WASP approach allows for judicious prescribing and improves patient satisfaction.

AOM and overuse of antibiotics

- 12 million outpatient clinic visits annually and half of prescriptions for respiratory infections in Oregon and the U.S. are due to AOM.[2,3]
- Regions of the U.S. with higher use of antibiotics have been linked to higher prevalence of C. difficile and antibiotic-resistant S. pneumoniae, the leading cause of bacterial AOM.[4,5]
- 50,000 pediatric ED visits each year result from adverse events from antibiotic use.[6]

Wait and see prescription (WASP) approach[7]

- The WASP approach of AOM in pediatrics is limited to children who will likely resolve their infection on their own (see algorithm below).
- Provide the parent or caretaker with a prescription and instruct them to fill it only if the child's condition worsens at any time or does not show clinical improvement within 48–72 hours of diagnosis.
- Always treat pain with ibuprofen or acetaminophen.
- Only use for children >6 months and if follow up can be ensured.

Who needs antibiotics?[7,8]

Diagnosis required middle ear effusion (MEE) plus:

1. Moderate to severe bulging of the tympanic membrane (TM);
2. New onset of otorrhea not due to otitis externa; or
3. Mild bulging of the TM and recent (<48 hours) onset of ear pain or intense erythema of the TM

Antibiotic therapy is indicated for patients with:

1. Severe* signs and symptoms at any age; or
2. Children <2 years with milder symptoms but bilateral disease

Consider antibiotics or offer observation in the following situations:

In consultation with parent/caretaker:

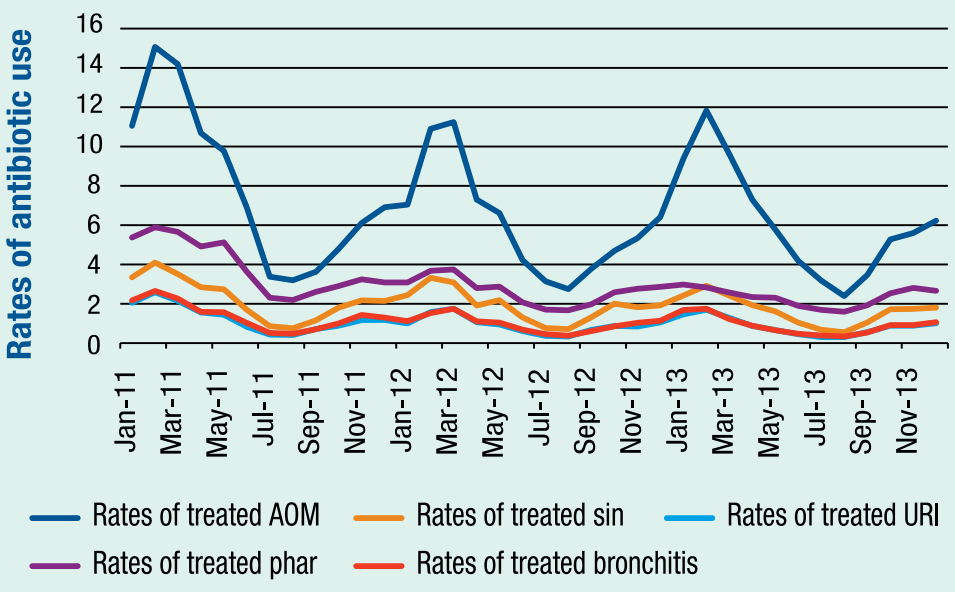
1. Children 6–23 months with mild symptoms and unilateral AOM;
2. Children >2 years with mild symptoms, either unilateral or bilateral

All patients with AOM, whether treated with antibiotics or not, need an assessment for pain.

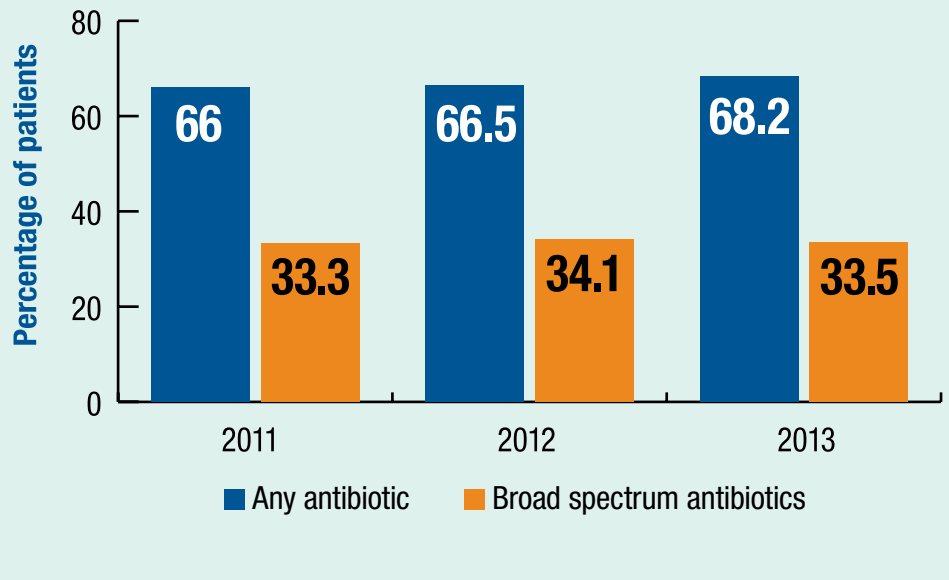
Oral medications are preferred due to longer duration of action.

* Severe sympoms defined as severe otalgia for at least 48 hours or temperature >39° C

Rates of antibiotic use for AOM, sinusitis, pharyngitis, bronchitis and URI in children, Oregon, 2011–2013



Percentage of patients diagnosed with AOM who filled a prescription, all ages, Oregon, 2011–2013



Evidence in support of WASP

- Significantly reduces antibiotic use[9]
- Unlikely to result in serious complications
- Patient satisfaction following either immediate antibiotics or WASP is very high (immediate antibiotics=92%, WASP=87%, no antibiotics=83%)

Shared medical decision-making model

- Educating parents on the benefits and risks of antibiotics
- Parent involvement in the decision of when to use antibiotics decreases use without increasing return visit rates or reducing patient satisfaction[10]

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