Otitis Media
Diagnosis and Management of Acute Otitis Media and Otitis Media with Effusion in Aboriginal children aged 6 months to 18 years in Rural and Remote Australian Communities

By Alliyson Chapple

BACKGROUND

Aboriginal children living in rural and remote areas of Australia often receive compromised health care and have a high prevalence of ear infections compared with Indigenous children in urban areas. These children also have barriers to accessing health care due to location, financial constraints, and a lack of culturally appropriate services.

METHOD

Using the latest guidelines and previous evidence from Australia and America, recommendations for the treatment of AOM and OME are made. Additionally, clinical guidelines were used as a Basis for accurately assessing children’s symptoms, determining if an infection is present, and deciding on the appropriate treatment regimens.

AIM

To produce culturally appropriate guidelines for the rural and remote Clinical Nurse Practitioner that will improve the care provided to Aboriginal children with Otitis Media.

RESULTS

Diagnosis

Otitis Media can be diagnosed using the following elements:
- Presence of middle ear effusion (MEE)
- Visual signs or middle ear infection

Strong Recommendations

- The only accurate way to diagnose Acute Otitis Media is a medical history indicating rapid onset of ear pain or tenderness, followed by observation of the tympanic membrane with a pneumatic otoscope with swabbing light power. In addition, cultural influences from two major Aboriginal communities should be considered.

Recommendation

A diagnosis of OME can be made using a pneumatic otoscope to visualize fluid behind the tympanic membrane. OME occurs without the rapid onset of signs and symptoms and without signs of inflammation.

PAIN

Strong Recommendation

Use of pain assessment chart is recommended for assessing the level of discomfort of children presenting with AOM or OME. Children of varying age groups can be assessed using the following diagnostic tool for pain for pediatric use.

Option

When a child is experiencing mild pain, a parent-written care plan can be administered by the Clinical Nurse Practitioner in Aboriginal communities. However, caution needs to be taken when administering medication to children for mild pain.

No Recommendation

Use of complementary or alternative medicines such as herbal eardrops are not recommended for pain management as their efficacy is yet to be proven.

Pain Management Guidelines

- Encourage routine nose blowing from an early age to clear possible bacteria from the nasopharynx.
- Encourage facial hygiene such as routine face washing, including the external ear area.
- Encourage mothers to breast feed for as long as possible.
- Encourage older children and adults to smoke in well-ventilated areas away from children.
- Encourage parents and guardians to seek medical advice as soon as any signs and symptoms of Otitis Media present.
- Encourage administration of the pneumococcal vaccine at the recommended age.

Oral Antibiotics

Strong Recommendation

Length of treatment of oral antibiotics should be not less than 7 days.

Strong Recommendation for Mild Acute Otitis Media

Amoxicillin (15-20mg/kg/day) or clavulanic acid plus amoxicillin (10-15mg/kg/day) for 5-7 days in populations where there is no high rate of penicillin-resistant pneumococci.

Recommendation for Severe Acute Otitis Media

Amoxicillin (50mg/kg/day) or clavulanic acid plus amoxicillin (25mg/kg/day) for 7-10 days in populations where there is a high rate of penicillin-resistant pneumococci.

Option for OME present for more than 3 months

Low-dose amoxicillin 10mg/kg/day for 1-2 days.

Topical Therapy

Option

Gentle cleaning using lateral position to clear the eardrums and allow access to the tympanic membrane for administration of antibiotics. Ear drops consisting of 0.2% neomycin and 0.1% prednisolone are used for 3-5 days or until the eardrum is clear.

Other Treatment Methods

Option

Such medicines may be available for the treatment of ear pain, fever and ear discharge and should be explored for their efficacy and provided use for the treatment of ear infections.

Cultural Issues And Increased Risk Factors

- Passive cigarette smoke in the home
- Sharing beds with other children
- Poor facial hygiene practices
- Lack of access to health care facilities

Summary

Guidelines are required for Clinical Nurses to practice in rural and remote areas to enable the latest evidence based practice to occur.

Acknowledgements

References

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