

## Understanding the Problem

Treatment of serous otitis media is designed to restore ventilation to the middle ear. Medications and allergy management may open the Eustachian tube and reduce fluid secretion. When needed, a tympanotomy, with or without tube insertion, can be used to allow air to flow into the middle ear cavity.



### Consultant:

Philip C. Bartlett, MD, FACS

This brochure is not intended as a substitute for professional medical care.

©1983, 1984, 1985, 1989, 1992, 2000, 2001  
The StayWell Company, 1100 Grundy Lane,  
San Bruno, CA 94066-3030. www.krames.com  
All rights reserved. Lithographed in Canada.

 **KRAMES**  
To order, call: 800-333-3032  
A MediMedia USA Company

COASTAL EAR, NOSE & THROAT  
BURGEONS/STE 302  
984 FIRST COLONIAL RD  
VIRGINIA BEACH VA 23454

## MIDDLE EAR FLUID

### Serous Otitis Media



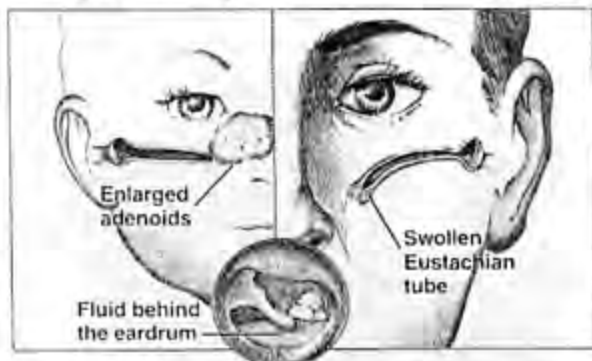
**S**erous otitis media is the medical term for "fluid in the middle ear." Its symptoms—primarily hearing loss with pressure or pain—are frequently experienced by children and adults alike, and typically follow an upper respiratory infection.

In most cases, the symptoms of serous otitis media disappear, but in some children and adults, especially those with enlarged adenoids or allergies, symptoms may persist.

Generally, the problem is found to be a blockage of the Eustachian tube. This narrow canal connects the middle ear to the back of the nose and permits air to enter the middle ear cavity, allowing the hearing mechanism to function properly. When the symptoms of serous otitis media, such as hearing loss, persist, particularly at a time when a child is learning to speak, medical evaluation and treatment are recommended.

## Eustachian Tube Function

An upper respiratory infection or allergy can interfere with Eustachian tube function. Tubes may swell shut, preventing drainage. In addition, adenoids at the back of the throat can become enlarged, blocking the Eustachian tube opening.



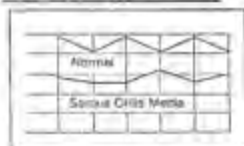
### Child Anatomy

A child's Eustachian tube is shorter and more horizontal, its opening is often blocked by adenoids.

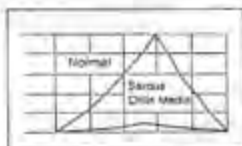
### Adult Anatomy

An adult's Eustachian tube is longer and more angled. Adenoids are usually small or absent.

### Hearing Tests



Audiogram. Hearing loss due to fluid in the middle ear



Tympanogram. Less eardrum motion due to fluid.

## Treatment

### Child

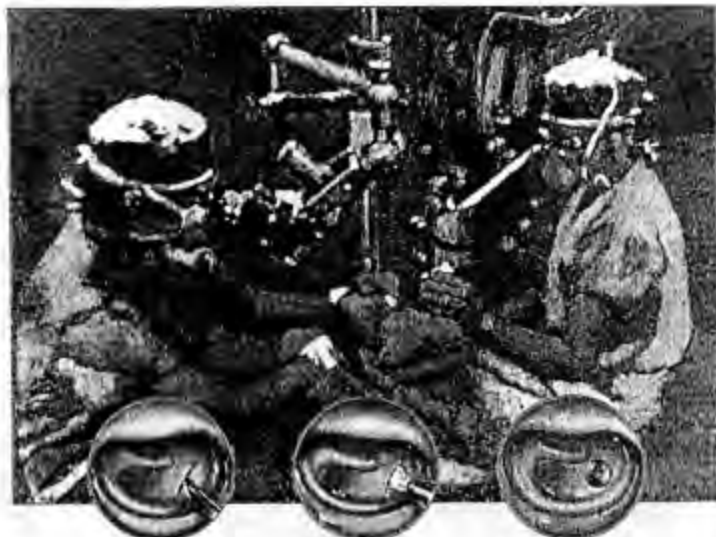
In children, treatment improves Eustachian tube function, allowing air to enter the middle ear to restore hearing. Antihistamines, decongestants, antibiotics, nasal sprays, and allergy management may reduce swelling and fluid secretion. Surgical tympanotomy, with or without tube insertion, and adenoidectomy may also be recommended.

### Adult

Antihistamines, decongestants, and steroids may be used to reduce swelling of the Eustachian tube. Tympanotomy and allergy management are sometimes recommended.

## Surgical Treatment – Tympanotomy

If hearing loss or fluid in the middle ear persists, an operation called a tympanotomy, with or without tube insertion, may be recommended in order to remove middle ear fluid. This procedure requires a general anesthetic for young children. Also in children, surgery to remove enlarged adenoids—**adenoidectomy**—may be done at the same time as tympanotomy.



A tiny incision is made in the eardrum.

Fluid is suctioned out.

A small tube may be placed through the incision.

### After Tympanotomy

An improvement in hearing is usually noticed right away and the incidence of middle ear infections should decline. In about 6 to 12 months, the tympanotomy tube will automatically expel into the outer ear canal to be removed by the doctor during a follow-up visit.

### Caution:

After tympanotomy, it is important to keep water out of the ear, especially when the tube is in place. Water in the middle ear increases the chance of infection. Don't place your head under water, or expose your ear directly to shower spray (wear a shower cap). To help prevent recurrences of serous otitis media, your doctor may recommend that you take decongestants and antihistamines at the first sign of nasal or sinus congestion.