



Clinical Update

For Telephone Triage Nurses

December 2011

Page 1 of 2

In this Issue:

- The Neti Pot and Primary Amebic Meningo-encephalitis
- Maximum Acetaminophen dosing.

Neti Pot and Primary Amebic Meningoencephalitis (PAM)

Primary Amebic Meningoencephalitis (PAM) is caused by *Naegleria fowleri*, the so-called "brain-eating amoeba". This is an extremely rare infection. There were 32 cases in the United States between 2001 and 2010.

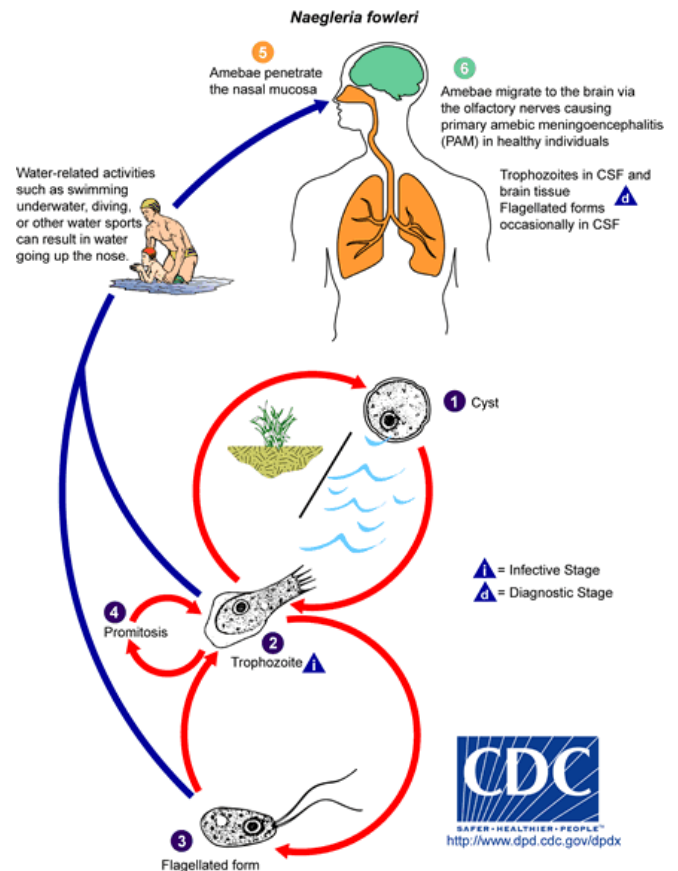
The majority of the cases of PAM occurred in the southern United States. These cases were usually linked to swimming or bathing in fresh water lakes, rivers, and ponds containing this amoeba. The amoeba can also be found in hot springs, geothermal water sources, and poorly maintained swimming pools.

The amoeba enters the body through the nose. See the diagram to the right.

In 2011 there were two cases of PAM reported in the state of Louisiana that occurred after nasal irrigation with a Neti Pot.

These two cases suggest — but is not definite proof — that the nasal irrigation fluid that the individuals used was somehow contaminated with the *Naegleria fowleri* amoeba. More information regarding these two cases is available on the Louisiana Board of Health website at: <http://new.dhh.louisiana.gov/index.cfm/newsroom/detail/2332>.

The Centers for Disease Control and Prevention (CDC) **now recommends that individuals should use distilled, sterile or previously boiled water for nasal irrigation.** It is also important to rinse the irrigation device after each use and then leave it open to air dry. The 2012 update of the Schmitt-Thompson telephone triage protocols will include these recommendations. The CDC has answers to Frequently Asked Questions (FAQs) available on their website at: <http://www.cdc.gov/parasites/naegleria/faqs.html>.



Neti Pot



Schmitt-Thompson
Clinical Content

Clinical Update

For Telephone Triage Nurses

Page 2 of 2

December 2011



Acetaminophen

Acetaminophen is one of the most commonly used medications in the world. It is an effective medicine for treating both fever and pain. It is available over-the-counter (e.g., Tylenol) and is also present in prescription pain medications (e.g., Vicodin and Percocet).

Taking acetaminophen in amounts higher than the recommended daily dosage (currently 4,000 mg per day in adults) can cause injury to the liver. The type of liver damage ranges from mild abnormalities in liver enzymes to acute liver failure. Individuals with existing liver disease, who consume more than 3 drinks of alcohol per day, or whose age is greater than 65 years may be more susceptible to liver injury at standard doses of acetaminophen.

Since acetaminophen is present in so many over-the-counter (OTC) and prescription medications, patients can unwittingly take higher than acceptable dosages.

On January 13th, 2011, the FDA announced that it was asking manufacturers of prescription acetaminophen combination products to limit the maximum amount of acetaminophen to 325 mg per tablet or capsule.

In the Fall of 2011 the McNeil pharmaceutical company made an announcement that they would be voluntarily lowering the maximum daily dose of Extra Strength Tylenol to 3,000 mg (six 500 mg tablets a day). McNeil has also announced plans to reduce the maximum daily dose of Regular Strength Tylenol to 3,000 mg (ten 325 mg tablets a day).

The 2012 update of the Schmitt-Thompson telephone triage protocols will have the following changes to the care advice reflecting the FDA and McNeil announcements.

Example Care Advice Statement

Pain Medicines:

- For pain relief, take acetaminophen, ibuprofen, or naproxen.
- Use the lowest amount that makes your pain feel better.

Acetaminophen (e.g., Tylenol):

- Take 650 mg by mouth every 4-6 hours as needed. Each Regular Strength Tylenol pill has 325 mg of acetaminophen. The most you should take each day is 3,250 mg (10 pills a day).
- Another choice is to take 1,000 mg every 8 hours. Each Extra Strength Tylenol pill has 500 mg of acetaminophen. The most you should take each day is 3,000 mg (6 pills a day).

Ibuprofen (e.g., Motrin, Advil):

- Take 400 mg by mouth every 6 hours as needed.
- Another choice is to take 600 mg by mouth every 8 hours.

Naproxen (e.g., Aleve):

- Take 250-500 mg by mouth every 12 hours as needed.

References:

- ◆ Acetaminophen Information. U.S. Food and Drug Administration. <http://www.fda.gov/Drugs/DrugSafety/Information-byDrugClass/ucm165107.htm>
- ◆ New Acetaminophen Dosing Instructions. McNeil. <http://www.tylenol.com/page2.ihtml?id=tylenol/news/newdosing.inc>

Copyright 2011.
Barton Schmitt, M.D.
David Thompson, M.D.
www.stcc-triage.com