Vibrio Parahaemolyticus, Food Poisoning

Vibrio Parahaemolyticus is a bacteria found on and in seafood. This bacteria is very sensitive to cold and heat. Proper storage of perishable seafood below 40° F (5° C), and subsequent cooking and holding above 140° F (60° C), will destroy this bacteria on seafood. Inflammation of the stomach and small intestine (*gastroenteritis*) caused by this bacteria is a result of insufficient cooking, or contamination of the cooked product by a raw product, followed by improper storage temperature. It is a major problem in Japan where seafood is more commonly consumed raw. It is also a relatively common among Americans who eat raw, poorly stored or undercooked seafood wherever it is served.

PREVENTION

The first step in prevention is to assume that all seafood may cause foodborne illness. Follow these steps to prevent infection:

- Wash hands, food preparation surfaces and utensils thoroughly before and after handling raw seafood to prevent recontamination of cooked foods.
- Keep refrigerated seafood below 40° F (5° C).
- Serve hot seafood immediately or keep it heated above 140° F (60° C).
- Divide large volumes of seafood into small portions for rapid cooling in the refrigerator. Hot, bulky foods in the refrigerator can raise the temperature of foods already cooled.
- Remember the danger zone is between 40° F (5° C) and 140° F (60° C).
- Follow approved home-canning procedures. These can be obtained from the Extension Service or from USDA bulletins.
- Heat canned foods thoroughly before tasting.
- When in doubt, throw it out.
- Infants, older persons, women who are pregnant and anyone with a compromised immune system are especially susceptible to foodborne illness. These people should not consume raw fish or raw seafood products.
- You are the key to preventing foodborne illness. By observing the simple rules of good handling, foodborne illnesses can be eliminated.

SYMPTOMS

Common symptoms are:

- Nausea.
- Vomiting.
- Diarrhea.

Illness commonly begins within 1 to 3 days after ingestion of the contaminated seafood. Abdominal cramping, low-grade fever, mild chills and headache may also occur.

DIAGNOSIS AND TREATMENT

Diagnosis can only be made by a special culture of stool. As the disease is typically self-limited (symptoms go away without specific treatment), this special culturing is not commonly done unless a number of people get symptoms following a common seafood meal. No specific treatment is needed by most patients. Symptoms usually go away spontaneously. Assuring adequate intake of fluids to replace losses is always needed when experiencing illnesses that cause nausea, vomiting and diarrhea.

HOME CARE INSTRUCTIONS FOR NAUSEA, VOMITING AND DIARRHEA

Small amounts of fluids should be taken frequently. Large amounts at one time may not be tolerated. Plain water may be harmful in infants and the elderly. Oral rehydrating solutions (ORS) are available at pharmacies and grocery stores. ORS replace water and important electrolytes in proper proportions. Sports drinks are not as effective as ORS and may be harmful due to sugars worsening diarrhea.

- As a general guideline for children, replace any new fluid losses from diarrhea and/or vomiting with ORS as follows:
  - If your child **weighs 22 pounds or under** (10 kg or less), give 60-120 mL (1/4 - 1/2 cup or 2 - 4 ounces) of ORS for each episode of diarrheal stool or vomiting episode.
  - If your child **weighs more than 22 pounds** (more than 10 kgs), give 120-240 mL (1/2 - 1 cup or 4 - 8 ounces) of ORS for each diarrheal stool or episode of vomiting.

- In a child with vomiting, it may be helpful to give the above ORS replacement in 5 mL (1 teaspoon) amounts every 5 minutes, then increase as tolerated.
- While correcting for *dehydration* (loss of body fluids), children should eat normally. However, foods high in sugar should be avoided because this may worsen diarrhea. Large amounts of carbonated soft drinks, juice, gelatin desserts and other highly sugared drinks should be avoided.
- After correction of dehydration, other liquids that are appealing to the child may be added. Children should drink small amounts of fluids frequently and fluids should be increased as tolerated.
- Adults should eat normally while drinking more fluids than usual. Drink small amounts of fluids frequently and increase as tolerated. Drink enough water and fluids to keep your urine clear or pale yellow. Broths, weak decaffeinated tea, lemon lime soft drinks (allowed to go flat) and ORS replace fluids and electrolytes.

Avoid:

- Carbonated drinks.
- Juice.
- Extremely hot or cold fluids.
- Caffeine drinks.
- Fatty, greasy foods.
- Alcohol.
- Tobacco.
- Too much intake of anything at one time.
- Gelatin desserts.

- *Probiotics* are active cultures of beneficial bacteria. They may lessen the amount and number of diarrheal stools in adults. Probiotics can be found in yogurt with active cultures and in supplements.
- **Wash hands well to avoid spreading the bacteria.**
- Anti-diarrheal medications are not recommended for infants and children.
- Only take over-the-counter or prescription medicines for pain, discomfort or fever as directed by your caregiver. **Do not give aspirin to children** because it may cause Reye's Syndrome.
- For adults with dehydration, ask your caregiver if you should continue all prescribed and over-the-counter medicines.
- If your caregiver has given you a follow-up appointment, it is very important to keep that appointment. Not keeping the appointment could result in a chronic or permanent injury, and disability. If there is any problem keeping the appointment, you must call back to this facility for assistance.

When diarrhea stops you may add the following foods that help the stool to become more formed:

- Rice.
- Bananas.
- Dry toast.
- Apples without the skin.

SEEK IMMEDIATE MEDICAL CARE IF:

- You are unable to keep fluids down.
- Vomiting or diarrhea become persistent or increase in severity.
- Abdominal pain increases or localizes. (Right sided pain can be appendicitis and left sided pain in adults can be diverticulitis.)
- You develop a high fever (an oral temperature above 102º F (38.9º C)) for over 3 days.
- Diarrhea contains blood or mucous.
- You have excessive weakness, dizziness, fainting or extreme thirst.

- You have significant weight loss. Checking weight 2 to 3 times per day in babies and children will help verify adequate fluid replacement. Your caregiver will tell you what loss should concern you or suggest another visit to your personal physician.
  - Weigh yourself today. Compare this to your home scale and record all weights and time and date weighed. Try to check weight at the same times every day.

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