Dilutional Hyponatremia, Syndrome Of Inappropriate Antidiuretic Hormone Secretion (SIADH)

SIADH (syndrome of antidiuretic hormone secretion) is a cause of low blood sodium level (*hyponatremia*). ADH (antidiuretic hormone) is released by a part of the brain to help the body hold onto water. The body carefully keeps water and sodium in balance. When there is more ADH, the body holds on to water, which dilutes the sodium. The balance is off and hyponatremia happens.

CAUSES

The most common causes are:

- Brain and central nervous system diseases (such as injury to the brain, stroke or meningitis).
- Cancer (especially small cell lung cancer and others).
- Lung disease (including lung failure, pneumonia or tuberculosis).
- Medications.

SIADH can happen with many other illnesses.

SYMPTOMS

When sodium levels are low, your cells tend to absorb the extra water and swell. The swelling happens throughout the body, but it mostly affects the brain. Severe brain swelling (*cerebral edema*) can cause death and can happen with sudden onset of hyponatremia (developing over 48 hours or less). Seizures or coma can also happen. Less severe hyponatremia can cause:

- Feeling sick to your stomach (*nausea*) and throwing up (*vomiting*).
- Difficulty keeping focused.
- Confusion.
- Lethargy.
- Agitation.
- Headache.
- Seizures.
- Anorexia (loss of appetite).
- Muscle weakness and cramping.

In SIADH, your body can get used to a mildly low sodium level.

DIAGNOSIS

Hyponatremia is identified by a simple blood test. Your caregiver will perform a history and physical exam to try to find the cause and type of hyponatremia. Other tests may be needed to measure the amount of sodium in your blood and urine.

TREATMENT

Treatment will depend on the cause.

- If the sodium is dangerously low, fluids are given through the vein. Medications may also be used to begin to correct the imbalance. If medications are causing the problem, your prescriptions will need to be adjusted.
- Restriction of water or fluid intake is often needed to restore proper balance.

The speed of correcting the sodium problem is very important. If the problem is corrected too fast, then nerve damage (sometimes unchangeable) can happen.

HOME CARE INSTRUCTIONS

- Take medications as directed by your caregiver. Many medications can make hyponatremia worse. Be sure you tell your caregiver about all your medications.
- Carefully follow any recommended diet, including any fluid restriction.
- You may be asked to repeat lab tests. Be sure to follow these directions.

- Your caregiver may talk to you about treatment of any underlying condition that caused the SIADH.

SEEK MEDICAL CARE IF:

- You develop worsening nausea, fatigue, headache, confusion or weakness.
- You get your original hyponatremia symptoms again.
- You have problems following the diet recommended.

SEEK IMMEDIATE MEDICAL CARE IF:

- You have shaking that you cannot control (*seizure*).
- You loose consciousness (black out).
- You have ongoing diarrhea or vomiting.

MAKE SURE YOU:

- Understand these instructions.
- Will watch your condition.
- Will get help right away if you are not doing well or get worse.

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