Water Intoxication, Hyper-hydration
Water Poisoning

Drinking fluids is important, but drinking too much can cause problems. Problems happen if water intake happens quickly over a short period of time and is faster than your body can remove it. *Electrolytes* (like salts in your body) and water continually move back and forth across cell membranes to keep them in balance. When this balance is upset, it can be very harmful or even fatal. Drinking too much water can lead to a condition known as water intoxication. It can also lead to a watering down of sodium in the body. This is called hyponatremia. Hyponatremia causes a shift of water from fluid outside your cells to the fluid in your cells. This causes cells to swell. If the cells in your brain swell too much, it can cause death.

CAUSES

- Water intoxication is more commonly seen in young infants.
  - Babies can get water intoxication from drinking several bottles of water a day or by drinking formula that has been diluted too much.
  - Their young age and small body mass makes it easy to take in too much water.
- Athletes can also suffer from water intoxication.
  - They can do this when they replace fluids rapidly after working out without replacing salt (sodium and electrolytes).

SYMPTOMS

Water intoxication is similar to drowning in fresh water. Untreated electrolyte imbalance and tissue swelling can cause:

- Irregular heartbeat
- Collapse with unconsciousness
- Fluid in the lungs (*pulmonary edema*)
- Fluttering eyelids
- Swelling of the brain and nerves. This can cause problems similar to alcohol intoxication and includes confusion, seizures, coma and finally, death.)

DIAGNOSIS

Your caregiver may suspect what is wrong by the problems you are having. A test of the sodium levels in your blood can also help make the diagnosis.

TREATMENT

- Water intoxication is best prevented. You are unlikely to get water intoxication, even when drinking a lot of water, if the intake is over time. Most normal adults need about three quarts of fluid each day. That also includes what you take in with food. You may need more water if:
  - The weather is very warm or very dry.
  - You are exercising.
  - You are taking certain medications.
- Although it is possible to drink too much water, it is a very uncommon condition.
- If water intoxication does happen, medications such as a water pill (*diuretic*) help correct the problem. Also, salts given through the vein are also helpful.

PROGNOSIS

If treatment is given before tissue swelling is severe and causes damage to your brain, a complete recovery over a couple of days is usual.

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