Leads to diagnosis of sleep apnea.

Stu Simmons isn't necessarily a night owl.

But his job as a switchman for Union Pacific Railroad keeps him up most nights past midnight.

The 63-year-old is a former Gothenburg resident who now lives in Brady. He had just returned home from work last September when he felt a sharp pain across his chest.

"It was about 12:30 a.m.," he recalls, "It just didn't go away so I tried lying down on several beds and couches in the house."

He finally sat in a chair and his eyes "went goofy" for about 30 seconds.

"I was seeing stars and everything was out of focus," Simmons said. "I started to feel a sharp pain from the tips of my fingers of my left hand all the way up my arm.

The same thing then happened with his right fingertips and arm.

Simmons didn't want to disturb his wife Carolyn, who teaches school in Maxwell, so he waited until 4 a.m. before he woke her up.

"That's when I knew something was really wrong," he said.

Carolyn drove her husband to the emergency room at Gothenburg Memorial Hospital. Doctors there called for an ambulance to take Simmons to the Lincoln Heart Institute.

Simmons was having a heart attack.

Because of kidney problems, surgeons waited a day to put in two stents in his arteries.

After three days at the institute, Simmons was released and started cardiac rehabilitation at GMH.

After 16 sessions, he was cleared to return to work.

But not so fast.

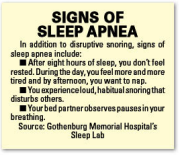
Since Simmons had been diagnosed with heart disease, Union Pacific officials said he needed a sleep study.

According to registered nurse Myra Gronewold who directs cardiac rehabilitation, cardiologists for the past five years have ordered sleep studies for anyone with symptoms of coronary heart disease.

Simmons did not have to travel far for the study since registered nurses Marietta Miller and Carol Cheetsos conduct sleep studies at GMH.

“The hardest part was getting all of the wires hooked up,” he said.

Patients then sleep overnight at GMH and their breathing and sleep patterns recorded.



SIGNS OF SLEEP APNEA

In addition to disruptive snoring, signs of sleep apnea include:

- After eight hours of sleep, you don't feel rested. During the day, you feel more and more tired and by afternoon, you want to nap.
- You experience loud, habitual snoring that disturbs others.
- Your bed partner observes pauses in your breathing.

Source: Gothenburg Memorial Hospital's Sleep Lab

About 1 p.m., he said Miller attached Simmons to a CPAP (Continuous Positive Airway Pressure) machine.

About the size of shoebox, a CPAP has a flexible tube that connects the machine with a mask or other interface device that is worn over the nose and/or mouth.

The CPAP pushes air through the airway passage at a pressure high enough to prevent apnea which is described as repeated episodes of not breathing during sleep for at least 10 seconds.

Gronewold said CPAPs can be prescribed for both obstructive apnea—disruptions in airflow—and central sleep apnea.

Central sleep apnea is caused when the brain pauses breathing, she said.

CPAP pressure is set according to a patient's sleep apnea which is determined from the sleep test.

During an episode, the upper airway becomes blocked, hindering or stopped breathing and causing blood oxygen levels to drop and blood pressure to rise, she explained.

"The individual eventually awakens and begins breathing which restores normal blood oxygen and blood flow to the brain," Gronewold said. "Ordinarily the brain regulates its blood flow to meet its own metabolic needs but repeated surges and drops in blood pressure and blood flow during numerous apnea episodes each night may reduce the brain's ability to regulate these functions."

When airflow through the nose and mouth is blocked, Gronewold said breathing may stop for 10 seconds or longer.

People who have sleep apnea usually snore loudly and are very tired during the day, she explained.

Once the results of his sleep study were returned, it was determined that Simmons did indeed have sleep apnea.

He was prescribed a CPAP machine and mask with a prescribed setting for air pressure.

Gronewold said a CPAP machine is the most common treatment for sleep apnea.

"It's a relatively easy treatment and there are many different masks and machines," she said. "Most times if you stick with a good company, they'll work to help you find a good mask.

CPAP machines are paid for by Medicare, Medicaid and usually by insurance, Gronewold said.

“And if a sleep study is prescribed, insurance will pay for it,” she said.

Gronewold said sleep apnea is the most commonly diagnosed condition amongst sleep-related breathing disorders.

It can lead to debilitating and sometimes fatal consequences for the 18 million Americans who have been diagnosed with the disorder, she said.

“We recognize it here as a fairly frequent condition especially with the male population,” Gronewold said.

In fact studies show that sleep apnea affects about one in four men and about one in 10 women.

Research also indicates that men with sleep apnea between the ages of 40 and 70 are particularly at risk of death from any source but especially from cardiovascular disease.

In fact, she said new evidence suggests that characteristic snoring and gasping of sleep apnea can set off potentially fatal heartbeat abnormalities.

Recent studies show that people with obstructive sleep apnea are more likely to suffer strokes and die in their sleep, recent studies show.

“Obstructive sleep apnea decreases blood flow to the brain, elevates blood pressure within the

brain and eventually harms the brain's ability to adapt to these changes and present damage itself," Gronewold explained.

Left untreated, Gronewold said sleep apnea can lead to excessive sleepiness, difficulties with daytime alertness and increased risk for driving accidents.

Sleep apnea is more common in people who sleep on their backs because there's more chance they are obstructing their throats, she said.

Sleeping on one's side is recommended, Gronewold said, to keep the throat open.

Although the CPAP took some time for Simmons to get used to, he swears by the equipment, noting that Carolyn wears one at night as well.

"You look silly but you're asleep in five minutes," he said.

Some machines, like the one Simmons uses, records apneas and other information during a sleep cycle which is reviewed by medical personnel.

Before his diagnosis, Simmons said he used to snore so loud it scared his children when they lived at home.

"Carolyn said I'd quit breathing and then I'd wake up—I don't know how many times in the night," he said.

Simmons said he was always tired as well.

These days, he goes to work and returns home and sleeps solid for eight hours and feels rested when he wakes up.

“I wish I would’ve have known this 20 years ago,” Simmons said. “It’s great. I wouldn’t be without it. I feel better all over.”

With a good night’s sleep, Gronewold said cardiac rehab patients heal faster and are able to better cope with stress and all other factors of coronary heart disease.

For more information about sleep apnea or GMH’s sleep study, contact Gronewold at cardiac rehabilitation by calling 537-3661.

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