FACT SHEET
VAGAL NERVE STIMULATOR (VNS) FOR SEIZURE CONTROL

Q. What is the vagal nerve stimulator (VNS)?
   A. The vagal nerve stimulator, or VNS, is a small device that generates electrical impulses to the brain. The device is surgically implanted just below the skin in the left side of chest and is usually visible as a small elevation. The VNS works by directly stimulating the Vagus nerve in the neck with small bursts of electricity thought to block or circumvent seizures. The device is programmed by the physician and adjusted annually, or as needed. The programmed electrical impulses are initially set at a moderate rate, typically for 30 seconds at 5 minute intervals. A magnet can be used to activate the device between intervals if an individual feels a seizure is beginning. It can take 2-3 years to properly adjust the device for an individual’s specific needs.

Q. What side effects are possible with VNS insertion?
   A. Side effects may include hoarseness, throat pain, and infection at the implantation site. It is important to watch for signs of infection, such as fever, chills, or drainage. Generally, the VNS poses a low risk of complications and is effective in reducing the severity of seizures for many individuals. Hoarseness usually occurs when the device is activated and subsides after a few months.

   Refer to the individual’s personal care physician for specific care instructions.

Q. How is the VNS magnet used?
   A. The individual will have a battery-type watch that is to be passed over the generator in the chest wall for approximately 2 seconds when the person feels a seizure is about to occur. (The VNS is just under the skin and is usually visible as a small elevation in the contour of the chest.)

   ** It is important not to hold the battery over the generator for long periods, as this may inhibit stimulation. **

Q. What are some VNS Magnet Safety Tips?
   A. Anything that can be affected by a strong magnetic field can also be damaged by the VNS magnet, if kept too close to it. The VNS magnet should be kept at least 10 inches from the following items:
   - bank cards
   - credit cards
   - watches
   - computer discs or hard drives
   - televisions,
   - other items that may be affected by magnets
More safety tips

• Keep the magnet away from the person’s wallet; keep it in a separate pocket or on a belt buckle.
• Create a metal lining for the wallet.
• If an individual uses a computer frequently, recommend against wearing the magnet on the wrist – it may get too close to the computer. Suggest wearing it on a belt buckle or putting it on the floor when working at the computer.
• Do not put magnets on top of a television, stereo, or other electronic device.
• Do not enter rooms or places that have strong electronic or magnetic fields or that have warnings for people with pacemakers or other implanted devices.
• Ask the doctor or nurse to write a letter to use while traveling that explains the VNS device and magnets. Wands used during security checks could affect the VNS device or the magnet could trigger a security alarm.
• Refer to the VNS Therapy Patient Manual and talk to the doctor for details about safety concerns with VNS Therapy and magnet use.

Sources:
VNS Handout from APS HCQU training “Seizure: Overview”

For more information on this or any physical or behavioral health topic, please call the APS HCQU office at 888-321-5861 or visit our website at www.hcqu.apshealthcare.com.

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