Have you developed a patient education tool that is effective in your practice? If so, consider writing for this column dedicated to different examples of patient education tools, particularly those about uncommon conditions. Possible topics include wound care, postoperative care for complex surgeries, and newer therapies. For more information, contact Associate Editor Jeannine M. Brant, RN, MS, AOCN®, via e-mail at jeannine.brant@svh-mt.org.

Superior Vena Cava Syndrome: An Education Sheet for Patients

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Bibliography

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The patient education sheet for patients with superior vena cava syndrome appears on the following page.
Superior Vena Cava Syndrome: An Education Sheet for Patients

Superior vena cava (SVC) syndrome is a rare but potentially life-threatening complication related to your cancer diagnosis. You will need to understand the signs and symptoms of and potential treatments for this type of syndrome.

The SVC is a large blood vessel located in the right side of your chest. All of the blood circulating through the body eventually returns to this large vessel. The SVC supplies blood to the right side of your heart. Major vessels feed into the SVC, including those that help supply blood to the brain, arms, and lower body (see Figure 1).

Along with this network of large blood vessels, major structures are located in this area: the lymph nodes, trachea, and esophagus. If an occlusion occurs in any of these blood vessels, blood will begin to back up into the SVC. If this happens, swelling or edema can develop in areas where the blood flow is inhibited. The most common signs and symptoms of this occurrence are:

- Swelling of the arms, hands, or face that is noticeable when rising in the morning and may fade after a few hours
- Rings, jewelry, or clothing that are newly snug
- Dizziness, especially with sudden changes in position
- Dysphagia or trouble swallowing
- Dyspnea or trouble breathing, especially with movement
- Hoarseness or change in voice
- Cough with or without bloody sputum
- Headache or confusion

**FIGURE 1. VENOUS CIRCULATION INCLUDING THE SUPERIOR VENA CAVA**

- Chest pain
- Blood vessels that “stick out” or are bulging, especially in the neck area
- Facial or eye swelling
- A purple or bluish color to nail beds, lips, or tips of fingers.

You will need to monitor and be aware of these symptoms. Here are some easy ways to help you and your family members or caregivers assess for these complications:

- Look at yourself in the mirror every morning. Look at your neck and chest. Look for any blood vessels in your neck that may be bulging or larger than normal.
- Take note of the way your clothes fit, especially on the upper body. Notice if any shirt collars feel tight or cuffs or sleeves feel more snug than normal.
- Look at your fingers and wrists and assess for any tightness around your rings or watchbands. Did they leave an impression in the skin previously?
- Are you more fatigued than usual after activity? Are you more short of breath with even minimal activity or talking?
- Do your friends, family members, or caregivers notice a change in your voice or the way you look? Those who see you regularly may notice changes before you do.
- Have you become forgetful? Note if you get headaches easily, especially with changes in position.
- Do you feel your heart “pounding in your head” when you lean over?
- Pay attention to how you feel with position changes, especially first thing in the morning. Are you easily lightheaded or dizzy with sudden changes in your position, especially as you sit up or stand up?

These symptoms are not always but may be related to SVC syndrome. If these symptoms develop, you should call your doctor immediately. Diagnostic tests may be performed to identify the cause or extent of the obstruction. The first, most simple, and least invasive test is a chest x-ray. Approximately 60% of patients will show evidence of SVC syndrome on examination. Another test that your physician may choose is a computed tomography (CT) scan. A CT scan involves contrast dye injected into your vein to allow your physician to see the obstruction. In addition to the CT scan, you may have a venography that maps out the vessels in your chest and better identifies the area of obstruction. Other tests may include magnetic resonance imaging, which also uses contrast dye to show the areas of obstruction and may be useful in determining treatment. Your physician also may order some laboratory tests, such as a blood gas to see how well your lungs are oxygenating your blood. A coagulation panel may be ordered to see how your blood is clotting.

Once SVC syndrome is identified, your physician can prescribe various treatments for the condition. Steroids or other anti-inflammatory drugs may be used if you are experiencing shortness of breath. Chemotherapy agents and radiation will be used to help reduce the tumor causing your obstruction. In some cases, a blood clot or emboli may be the cause of the obstruction, especially if you have a central line in your chest area. If this is the case, medications that slow the blood’s clotting ability will be used to help prevent further clots, and drugs that dissolve clots also may be used. If a tumor is causing the obstruction, most symptoms begin to resolve within 7–10 days of starting treatment.

You must recognize the signs early to help ensure prompt treatment of a potentially life-threatening emergency. Keep a list of the signs and symptoms where you can easily access it, and include your physician’s phone number or clinic number so you can call if you have any questions. With early recognition, you will find managing your symptoms much easier and you will help your physician promptly treat this manageable diagnosis.

**Internet Resources**

Search for superior vena cava syndrome at the following Web sites.

- **National Cancer Institute**: www.cancer.gov
- **American Cancer Society**: www.cancer.org
- **Health A to Z**: www.healthatoz.com
- **Cancer Consultants Oncology Resource Center**: http://patient.cancer careconsultants.com

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