Suspected Upper-Extremity Deep Vein Thrombosis

Deep vein thrombosis (DVT) occurs when there is a clot (https://www.radiologyinfo.org/en/info/bloodclot) in a vein that is deep within your body. If this happens in your upper extremity (arm, wrist, or hand), it is called upper-extremity DVT. Causes of upper-extremity DVT include trauma, infection, inflammation, heart failure, pregnancy, and cancer. Symptoms may include upper-extremity swelling, pain or tingling, heaviness, or a feeling of "pins and needles." Upper-extremity DVTs are sometimes associated with having a device in the body such as a catheter, pacemaker, or defibrillator. These upper-extremity DVTs often have no symptoms. It is important to diagnose DVT because it may need to be treated with blood thinners. To help in the diagnosis, a doctor may ask you about symptoms, do a physical examination, or use blood tests. Imaging tests are often needed to see the location and extent of the DVT.

For suspected upper-extremity DVT, initial imaging using ultrasound (https://www.radiologyinfo.org/en/info/us-carotid) duplex Doppler of the upper extremity is usually appropriate. CT (https://www.radiologyinfo.org/en/info/headct) of the upper extremity veins with intravenous contrast (a special dye injected into your blood) may be appropriate.
MRI (https://www.radiologyinfo.org/en/info/mri-brain) of the upper extremity veins (MRV) without and with contrast or MRV of the upper extremity without contrast may also be appropriate.

For more information, see the Blood Clots (https://www.radiologyinfo.org/en/info/bloodclot) page.

— By Sandra V. Kotsis, MPH and Tasneem K. Lalani, MD. This information originally appeared in the *Journal of the American College of Radiology*.

Disclaimer

This information is copied from the RadiologyInfo Web site (http://www.radiologyinfo.org) which is dedicated to providing the highest quality information. To ensure that, each section is reviewed by a physician with expertise in the area presented. All information contained in the Web site is further reviewed by an ACR (American College of Radiology) - RSNA (Radiological Society of North America) committee, comprising physicians with expertise in several radiologic areas.

However, it is not possible to assure that this Web site contains complete, up-to-date information on any particular subject. Therefore, ACR and RSNA make no representations or warranties about the suitability of this information for use for any particular purpose. All information is provided "as is" without express or implied warranty.

Please visit the RadiologyInfo Web site at **http://www.radiologyinfo.org** to view or download the latest information.

Note: Images may be shown for illustrative purposes. Do not attempt to draw conclusions or make diagnoses by comparing these images to other medical images, particularly your own. Only qualified physicians should interpret images; the radiologist is the physician expert trained in medical imaging.

Copyright

This material is copyrighted by either the Radiological Society of North America (RSNA), 820 Jorie Boulevard, Oak Brook, IL 60523-2251 or the American College of Radiology (ACR), 1891 Preston White Drive, Reston, VA 20191-4397. Commercial reproduction or multiple distribution by any traditional or electronically based reproduction/publication method is prohibited.

Copyright ® 2026 Radiological Society of North America, Inc.