

EFFORT THROMBOSIS

DESCRIPTION

Clotting (thrombosis) of the vein(s) of the upper extremity associated with repetitive vigorous activity, strenuous activity or trauma. This results in fatigue, heaviness, pain, weakness and swelling of the upper extremity (hand, forearm, arm and shoulder).

FREQUENT SIGNS AND SYMPTOMS

- Fatigue often associated with or exacerbated by activity
- Numbness and heaviness of the upper extremity
- Dull aching pain
- Cramping in the arm
- Swelling of the upper extremity with superficial veins dilated (engorged veins near skin surface) and feeling of fullness of the arm
- Poor circulation, characterized by coldness, swelling and blue discoloration in the hands and fingers
- Tenderness in the armpit

CAUSES

Clotting of the main deep vein of the upper extremity (shoulder, arm, forearm, and hand). Sports requiring overhead positioning of the arm may stretch the vein, resulting in small tears within the vein. This predisposes to clotting, particularly in those individuals with a predisposition to clotting (history of clots, on oral contraceptive medications or dehydration). Alternatively, the vein may be compressed between various structures including tendons, and/or first rib and clavicle.

RISK INCREASES WITH

- Prolonged periods of inactivity
- Dehydration
- Oral contraceptive medications
- Sports requiring repetitive overhead activities, such as throwing in baseball, volleyball, tennis
- History of clots in the calves (deep venous thrombosis or phlebitis)
- Previous history of effort thrombosis

EXPECTED OUTCOME

Treatable with appropriate measures, including medications, with resolution of symptoms within 1 week. Often some residual symptoms persist.

POSSIBLE COMPLICATIONS

- Permanent numbness or loss of arm or hand strength.
- Chronic disability - aching, muscle cramping, fatigue of the upper extremity
- Recurrence of clotting of the vein.
- Death from clot breaking off and going to the lungs (pulmonary embolus)
- Stroke from clot breaking off and going to brain
- Bleeding at other parts of the body due to treatment with blood thinners.

GENERAL TREATMENT CONSIDERATIONS

Initial treatment usually involves rest, heat to the affected area and elevation of the involved extremity. Medications to break up the clot or blood thinners to prevent the clot from enlarging while the body dissolves the clot may be prescribed. Surgery is rarely necessary to remove the clot.

MEDICATION

- Non-steroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take if surgery planned in 7 days or less), or other minor pain relievers, such as acetaminophen are often recommended. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs. If given blood thinners, do not take non-steroidal anti-inflammatory medications unless specifically approved by your physician.
- Blood thinners, such as heparin initially and warfarin pills chronically, may be prescribed. Care should be taken to note excessive bleeding, blood in your stool, black and tarry stools, coughing up or spitting up blood, or bloody nose. If any of these occur, notify your doctor or go to the emergency room immediately.
- Thrombolytic agents, medications given to specifically break up the clot, particularly if the clot is identified acutely

NOTIFY OUR OFFICE IF:

- Symptoms worsen or do not improve in 1 week, despite treatment.
- Any sign of progression of the clot
- Shortness of breath or chest pain
- Signs of a stroke:
 - Headache that steadily worsens
 - Drowsiness
 - Unconsciousness
 - Change in the size of the eye pupils.
 - Vomiting
 - Inability to move arms and legs equally well on both sides
 - Stiff neck
 - Convulsions
 - Noticeable restlessness
 - Confusion or disorientation or mental status changes
- Evidence of bleeding while on blood thinners or thrombolytic agents including blood in your stool, black and tarry stools, coughing up or spitting up blood and/or recurrent bloody nose.