

DEFINITIONS

1. Phlebothrombosis is the term applied when thrombosis occurs in the deep veins in the absence of any inflammatory reaction in the veins. It is commonly referred to as **Deep Venous Thrombosis**.
2. Thrombophlebitis is the term applied when thrombosis occurs in veins with inflammatory reaction in the vein, the thrombosis being secondary to that inflammation. Such thrombosis usually occurs in close time-relationship to infection of the surrounding tissues or, occasionally, trauma to the vein concerned.

CLINICAL MANIFESTATIONS

PHLEBOTHROMBOSIS

3. The deep veins of the calf are those most frequently affected.
4. In a typical case, the leg is swollen and oedematous and is usually warmer than the opposite leg. The calf is tender and painful on dorsiflexion of the foot (Homan's sign). The superficial veins may be prominent.
5. The condition not uncommonly occurs without any symptoms or signs and may not be noted at the time of its occurrence, the first real manifestation being a pulmonary embolism.
6. Clinical diagnosis is frequently unreliable although newer techniques of investigation such as conventional and ultrasound angiography or the use of radioactively labelled fibrinogen have led to more accurate diagnosis.
7. In the vast majority of cases, the veins ultimately recanalize but frequently the valves are destroyed or rendered incompetent and, in time, give rise to varicose veins.

THROMBOPHLEBITIS

8. Inflammation with secondary thrombosis may occur in any part of the venous system and the manifestations depend entirely upon the site of the thrombosis.
9. The thrombus which results from inflammation of a vein is usually firmly adherent to the vein wall and, consequently, is less likely to become detached and cause a pulmonary embolism than is that of a phlebothrombosis.

AETIOLOGY

PHLEBOTHROMBOSIS

10. In 1856, Virchow identified three predisposing factors -
 - 10.1 Slowing of the bloodstream

- 10.2 Changes in the vessel wall
- 10.3 Changes in the blood itself
- 11. Phlebothrombosis is more likely to occur in
 - 11.1 those who suffer from congestive cardiac failure
 - 11.2 those who are immobile following surgery (especially abdominal surgery) and debilitating illnesses
 - 11.3 those who are obese
 - 11.4 those who have varicose veins
 - 11.5 those who are taking a contraceptive pill

THROMBOPHLEBITIS

- 12. Conditions which may be associated with thrombophlebitis are
 - 12.1 Trauma to the vein concerned
 - 12.2 Thrombo-angiitis obliterans
 - 12.3 Thrombophlebitis Migrans in which multiple venous thromboses occur, usually in superficial veins although deeper ones may be involved. Frequently, the cause is unclear but often there is an association with carcinoma, particularly of the pancreas, breast, stomach or ovary
 - 12.4 Tropical thrombophlebitis. Outbreaks have been reported in Africans. The cause is unknown and thrombosis is widespread, often with involvement of the visceral veins.
 - 12.5 Infective thrombophlebitis. This may be secondary to middle ear sepsis, puerperal sepsis, suppurative osteomyelitis and bronchiectasis. In such lesions, the thrombi themselves become infected and detached fragments cause pyaemia.
 - 12.6 Pylephlebitis Suppurativa, a rare condition in which infection e.g. from appendicitis - leads to progressive ascending thrombosis and suppuration with possible formation of multiple abscesses in the liver.
 - 12.7 Conditions in which there is bacteraemia, notably typhoid fever. It is thought that circulating organisms settle in the intima of the veins and produce an acute endophlebitis with secondary thrombosis.
 - 12.8 Any condition which causes irritation and inflammation of the vein wall may produce secondary thrombosis.
- 13. The aetiological factors are those of the primary condition.

CONCLUSION

14. Phlebothrombosis and Thrombophlebitis are conditions affecting veins. There are many causes and they may arise on occasion without identifiable cause.

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