THROMBOANGIITIS OBLITERANS

(BUERGER'S DISEASE)

DEFINITION

 Thromboangiitis obliterans – often referred to as Buerger's disease – is an inflammatory condition of arteries and veins in which the affected vessels show thrombosis, organization and re-canalization. The condition is different from atherosclerosis and the presence of atherosclerotic lesions in limbs affected by Buerger's disease is coincidental.

CLINICAL MANIFESTATIONS

- 2. The disease occurs almost exclusively in men who are heavy smokers, the onset being in the 20 to 40 years age range. It characteristically starts in the smaller vessels of the legs and feet but sometimes affects the upper limbs.
- 3. A superficial, migratory, nodular phlebitis may occur early in the disease and cold sensitivity, of the Raynaud type, often confined to the hands, occurs in one half of patients.
- 4. A typical symptom is claudication pain felt in the instep, calf claudication being less common since the disease does not usually spread proximally to involve the popliteal or superficial femoral arteries. The pain may occur at rest.
- 5. The disease may be recognized because of failure of minor injuries to heal normally due to the impairment of blood supply resulting from the disease.

AETIOLOGY

- The exact cause of the disease is unknown although one particularly important factor is smoking – particularly of cigarettes – the disease being almost unknown in nonsmokers. It occurs in all parts of the world and affects all races.
- 7. A high incidence of HLA antigens A9 and B5 in affected individuals indicates a genetically-determined predisposition and it has been postulated that the causal factor is an in-built sensitivity to tobacco proteins. Clinically, progress of the disease appears to be arrested or diminished by giving up smoking.
- 8. Exposure to cold may bring symptoms to light or exacerbate them when they are already manifest because of the normal reflex reduction of blood flow to the extremities when temperatures are low. This effect is, however, temporary as is the effect of exertion which may bring on claudication in the established case.

CONCLUSION

9. The cause of thromboangiitis obliterans is unknown although a definite connection with tobacco smoking has been established. The effects of the condition may be temporarily worsened by exposure to cold or on exertion.

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