Peripheral Vascular Disease (PVD)

Dr GA Sirhindi¹, Dr M Zubair Tahir², Dr M Riaz³

Peripheral vascular disease (PVD), also known as peripheral artery disease (PAD) and is caused by obstruction in blood vessels which results in damage in the surrounding areas of legs, feet and hands. Peripheral vascular disease is a long term complication of diabetes. The prevalence of PVD increases with age and starting from gentle pain during walk can end in tissue loss/ gangrene. People with PVD are known to be at high risk of foot complications including foot ulceration, infection and amputation (1). The risk of amputation (Cutting/removal or affected part of body) is increased with poor sugar control (2).

It has four stages

- Light pain when walking
- Severe pain when walking shorter distances
- Pain while resting
- Tissue loss/damage

Symptoms start with pain in hands or legs and it must be consulted with doctor and remember severe complications may develop. The common symptoms are:

- Numbness
- Light pain when person walks.
- Muscle cramps
- Wounds or ulcers. Which heal very slowly or do not heal
- Decreased hair and nail growth in hands or foot which is affected area
- Change in colour of affected area, blue or pale, and it is very dangerous sign

In South Asian countries diabetes is increasing so complications like PVD and foot amputation occurrence also rising. In India studies show prevalence of PVD in type 2 diabetics from 3.9% to 4.3% (3) (4) (5). With passage of time with diabetes the risk is increased and in a study with 25 years of diabetes and above PVD was seen 15.4% (6).

In Pakistan studies showed PVD prevalence, in known diabetics, from 2.1% to 4% (7) (8) (9) (10). In China study from 30 provinces, municipalities and autonomous regions the prevalence of PVD was 5% (11) and in another the prevalence of PAD was 8.7% (12).

---

¹ Author is Assistant Professor, pathology department, in Sheikh Zayed medical college & hospital Lahore Pakistan.
² Author is Public health consultant worked in the UK and Pakistan
³ Author is senior medical doctor in Pakistan
In Netherlands, a study in diabetics PVD found 10.6% in diabetics diagnosed in GP (GPDM) (13). In Australia DRUID Study, among known diabetics PVD prevalence was 12% in urban area (14). In France a study showed the prevalence 13.1% mild and 6.3% moderate to severe peripheral vascular disease (15).

In Germany a study showed the prevalence of PAD 18.6% (16). In Sweden, 21% had signs of peripheral arterial disease (17). In Spain, study in T2DM population with average age 63.9 years PVD prevalence found 31.7% (18). In Portugal study in T2DM patients with mean age 59 +/- 10 years showed PVD prevalence 33% in Portuguese (19).

In the UK, in survey of age 55 to 74 years the prevalence of PVD found 4.5%. (20). In study in English community in diabetics the prevalence of PVD in type 1 diabetics was 8.7% and in type 2 diabetics 23.5% (21).

In the USA a study based on data 1999-2000 NHNE Survey among individuals 40 years and above found PAD 4.3%. This study reveals that more than 5 million adults in the USA are affected by PAD (22). In the multicenter, study conducted at 27 sites in 25 cities and 350 primary care practices 13% had PAD (23).

**Advice to diabetics**

- Care hands and especially **FEET** as you care your **FACE**. Wash with (slightly warm) water daily at night, light massage fingers of feet and hands and then clean gently with **CLEAN** towel.
- Keep an eye on the symptoms mentioned above. If any symptom appears consult your doctor immediately.
References