

## **RISK FACTORS OF DIABETIC FOOT**

Guide: Dr. Anish.T.S.  
Dr. B.Jayakumar.

Done by: Preetha.P.T., Ramiz Raja.A, Sabari Jayaram.

### INTRODUCTION:

According to the most recent estimates published in the Diabetes Atlas 2006, India has the largest number of diabetic patients in the world, estimated to be  $\approx 40.9$  million in the year 2007 and expected to increase to 69.9 million by the year 2025. The greatest absolute increase in the number of people with diabetes will be in India. It was shown that diabetes had increased threefold over a space of 14 years in rural population in South India.

### OBJECTIVE:

To identify the risk factors for development of diabetic foot in 50 subjects with type 2 diabetes mellitus.

### Methodology:

**Study Design:** Case Control study.

**Study Subjects:** Cases – 50 individuals with diabetic foot having type 2 diabetes mellitus diagnosed at least 5 years back, taking oral hypoglycemics and who had been admitted to the surgery wards of MCH, Trivandrum between October, 2007 and December, 2007.

**Controls:** 100 Individuals without diabetic foot having type 2 Diabetic Mellitus diagnosed at least 5 years back, taking oral hypoglycemics and who came to the diabetic clinic OP, MCH, Trivandrum between October – December, 2007.

**Study tool:** Semi Structured questionnaire.

**Study Setting:** Surgery wards & diabetic clinic OP, MCH, Tvm.

**Study period:** October – December, 2007.

### RESULTS & DISCUSSION:

The mean age for cases is 54.04 (51.12 – 56.96) and the mean age for controls – 55.66 (53.5 – 57.82). The sex distribution for cases: 20% were females and among controls 35% were female.

There is association between low educational status and diabetic foot. (P=0.000, Odds ratio – 7.318).

Manual and skilled laborers have more chance of developing diabetic foot (p = 0.000, Odds ratio – 4.33).

Poor knowledge about diabetes contributes more to the development of diabetic foot. (p=0.000)

Odds ratio – 4.31)

People who take medicine irregularly are more likely to develop diabetic foot (P=0.000, Odds ratio 6.46)

There is association between irregular blood sugar check up and diabetic foot (p=0.000, Odds ratio 7.85)

Smokes are more likely to develop diabetic foot (P=0.000, OR 7.765)

Alcoholics are more prone to develop diabetic foot (P=0.000, OR 8.14)

Hypertensive are more likely to develop diabetic foot (P=0.001, OR=3.16)

Patients with dyslipidemia are likely to develop diabetic foot (P=0.000, OR=4.263)

There is association between visual disturbances and diabetic foot. (p=0.008, OR = 2.786).

Misuse of footwear and diabetic foot are associated (P=0.000, OR=13.05)

There is association between diabetic foot and chronic limb oedema (P=0.000, OR=17.975)

There is association between absence of posterior tibial pulsations and diabetic foot (p=0.000, OR=5.209)

There is association between deformities of foot and diabetic foot (P=0.000, OR=10.21)

There is association between diabetic foot and instantaneous infections. (p=0.000, OR=24.00)

There is association between diabetic foot and positive sensation (p=0.000, OR=15.167)

There is association between diabetic foot and negative sensation (p=0.000, OR=4.63)

There is association between vibration sense & proprioception.

## CONCLUSION:

Development of Diabetic foot can be prevented by timely screening for peripheral neuropathy and sensations, routine screening for foot ulcers and infections, maintaining good glycemic control, screening for hypertension.

---