

Detection of Foot Ulceration

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Abstract: Diabetes is a chronic illness that requires continuous medical care and precaution. Patients who are diabetic for a long time and those who have poor glycaemia control often leads to peripheral neurovascular disorder which results in foot ulceration. 40% to 50% of diabetic patients are affected by foot ulceration. Diabetic foot ulceration is caused due to Diabetic mellitus. So, early detection and prevention of foot ulcers plays a vital role. This project describes the early detection of chronicity foot lesions in diabetic patients by monitoring their foot pressure and a hardware is set up to monitor the foot pressure in diabetic patients continuously with the help of force sensing resistors. In this method diagnosis of foot ulceration is done in an earlier stage thereby the further ulceration is prevented. The aim of this project is to develop low cost, lightweight foot pressure scanner and check its reliability and validity which can help to prevent foot ulceration. We accomplish this by placing pressure sensors in seven or eight pressure points in a sole which is then used by the patient. We have also made it user friendly by passing and storing these results to a server. It indicates the patient's current status and also can be accessed by the patient or the doctor through an application on any smartphone.

Keywords: Foot

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