INTRODUCTION AND AIM OF THE WORK

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One of the most frequently occurring disease with more or less generalised vascular pathology is diabetes mellitus (D.M.). Almost invariably, angiopathy has been demonstrated in different organs. In a few investigations the inner ear has been histologically examined in patients with diabetes mellitus and in all of these; inner ear changes have been demonstrated (Axelsson et al 1978).

Costa (1967) discribed that thickening of the vessel wall of the modiolus could occur in diabetes mellitus. Furthermore thickening of the vessel wall of stria vascularis, spiral ligament and vasa nervorum of the acoustic nerve were discribed by Kover (1973). Also he discribed that haemorrhage could occur in modiolus, endolymph and perilymph as a complication of diabetes mellitus.

As a result of generalised angiopathy in the peripheral as well as the central auditory system one would expect some influence from the disease on the

hearing (Axelsson et al 1978).

Many workers such as (Jorgensen & Buch 1961, Costa 1967, Axelsson & Fagerberg 1968, Gibbin & Davis 1981, Delucchi et al 1982 and Sieger et al 1983) studied the effect of diabetes mellitus on the inner ear, however not all of them agree that diabetes mellitus can lead to a sensorineural hearing loss, and those who believed that diabetes mellitus can cause hearing loss still quote widely varying incidences.

The hearing loss was characteristically bilateral beeing confined to the higher frequencies and insiduous in onset (Shenoi 1978).

Wilson (I982) gave preliminary results suggested an increased hearing loss in diabetic patient over 40 years old than in a non diabetic one of the same age .

The hearing loss may be sudden in onset thus resembling a vascular accident and two such cases were described by Jorgensen (1960).

Jorgensen and Buch (1961) found sensorineural