



▼ POST GRADUATES ABSTRACTS

PG - 50 : EVALUATION OF CAROTID INTIMA MEDIA THICKNESS BY B MODE USG IN HYPERTENSIVE PATIENTS COMPARED WITH NORMOTENSIVE PATIENTS.

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Aim & Objectives: To assess the carotid intima-media thickness (CIMT) between hypertensive and normotensive patients using high resolution B mode Ultrasonography. To compare the CIMT between hypertensive and normotensive population. To quantify IMT as an early marker of Atherosclerosis

Materials and Methods: This study included 50 hypertensive and 50 age and sex matched normotensive patients. Brief history was taken and general physical examination of the subjects was done. All patients had their blood pressure levels checked. Examination of the CIMT was done using 12.0MHz linear transducer MINDRAY DC-8 ultrasound scanner. CIMT was measured in the far wall 1 cm proximal to the carotid bulb on both CCA. The mean value was calculated and values greater than 0.7 mm were considered to be abnormal. These values of hypertensive patients were compared with that of normotensive subjects.

Results: The systolic & diastolic BP(150/92mmHg) was significant($p=0.0001$) in hypertensive patients when compared to the normotensives (119/79mmHg). The average CIMT for hypertensive was 0.8mm and 0.74mm on the right and left side respectively. Whereas in normotensives, average CIMT was 0.58mm and 0.61mm. The odds of developing abnormal CIMT among hypertensive patients was 11 fold more when compared to normotensive individuals(odds ratio=11.96). CIMT was more on the right side when compared to the left side. BMI was significantly increased in hypertensive group when compared to normal group.

Conclusion: This study proved that CIMT was significantly increased in hypertensive patients when compared to the normotensive subjects. CIMT is a surrogate marker of atherosclerosis. Hence B mode ultrasound is invaluable in predicting vascular complications in hypertensive patients.