

Clinical data and diagnostic findings in patients with ischemic heart disease undergoing coronary angiography: a cross-sectional study from a tertiary hospital in Sudan, Africa

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INTRODUCTION

Coronary angiography is done for the evaluation of patients with coronary disease. It helps physicians to know the place of lesions for management. Clinical findings about coronary angiography were unknown in Sudan. We aimed to assess clinical and diagnostic findings among patients undergoing diagnostic coronary angiography

METHODOLOGY

We conducted a cross-sectional study for all consecutive patients with ischemic heart disease (IHD) undergoing coronary angiography from the first of November 2020 till 18th of February 2021. Clinical and diagnostic findings, risk factors, number of affected vessels were gathered from patients. We compared hypertensive with non-hypertensive participants.

RESULTS

A total of 255 with a mean age of 57.9 ± 10.4 were included in the study. Of them, 167 (65.7%) were males, and 34 (13.3%) were smokers. Hypertension (47.5%, 121/255) and diabetes (40.0%, 102/255) were the most common risk factors. Most of the patients were STEMI (41.4%) and NSTEMI (34.9%). Diagnostic Findings showed that the most affected coronary vessels were right coronary artery (RCA) (47.2%) {showing mostly severe stenosis (28.7%) followed by moderate stenosis (27.8%)} and mid-left anterior descending artery (LAD) (44.4%) {showing mostly severe stenosis (42.6%) followed by moderate stenosis (17.6%)}. There was a significant higher number of diseased right coronary artery (RCA) (55.6% vs 39.8%, $p = 0.013$) and circumflex artery (46.2% vs 33.1% $p = 0.035$) and lower number of diseased proximal-LAD (34.2% vs 46.6%, $p = 0.046$) in patients with hypertension.

CONCLUSION

Our result identified RCA and mid-LAD as the most common diseased coronary vessels. There were significant differences and high number of diseased circumflex artery and RCA and lower number of diseased proximal-LAD for in patients with hypertension.