Open Access Original Article

# Prevalence of peripheral arterial disease among patients with acute coronary syndrome, a sample of Iraqi patients in Al-Yarmook Teaching Hospital 2016

**DOI:** https://doi.org/10.32007/jfacmedbagdad.6321824

**Osama A. Altaie*** **FIBMS**
**Abbass N. Al-Sharifi**** **FRCP**



**Abstract:**

**Background:** A significant proportion of patients with ischemic heart disease have been associated with peripheral arterial disease, yet it is still underestimated by our health system as many of patients are asymptomatic and this condition remains under diagnosed and therefore undertreated.

**Objective:** To study prevalence of peripheral arterial disease of the lower limbs in patient with acute coronary syndrome and its association with certain risk factors.

**Method:** A cross sectional descriptive study was conducted in the coronary care unit at Al-Yarmouk Teaching Hospital from the 1st of January 2016 to the 1st of November 2016 where hundred and fifty (150) patients enrolled to the coronary care unit with approved acute coronary syndrome, had been evaluated for peripheral arterial disease by assessing Demographic, risk factors and clinical features of the patients, including age groups, gender, hypertension, diabetes mellitus, smoking, dyslipidemia, family history. Of coronary artery disease, previous history of cerebrovascular accident, body mass index, leg pain, measurement of ankle brachial index using hand held continuous wave Doppler device.

**Results:** in 150 acute coronary syndrome patients were included male were (70.7%) , peripheral arterial disease was found in 31.2% through measuring ankle brachial index, 51% of those patients were asymptomatic and 29.8% with atypical leg pain and 12.8% with intermittent leg pain and 6.4% had pain at rest. And ankle brachial index in the 150 patients with acute coronary syndrome were 68.8% normal (ankle brachial index =1.4-0.91) and 21.3% (ankle brachial index =0.9-0.71) and 7.3 %( ankle brachial index =0.69-0.41) and 2.6% (ankle brachial index ≤0.40).

Factors independently related to peripheral arterial disease were old age (>60 years) which constitutes 51% and p value was 0.013, and smoking which constitutes 46.8% and P value was 0.04, and dyslipidemia which constitutes 74% and P value was 0.03, and finally previous history of cerebrovascular accident which constitutes 21.2% and P value was 0.0018.

**Conclusion:** The prevalence of peripheral arterial disease in patients presenting with acute coronary syndrome is considerable and significant, the majority of patients were asymptomatic, it is associated with increased cardiovascular risk. Factors like aging, hypertension, diabetes mellitus, smoking, previous history of cerebrovascular accident, and dyslipidemia were strong predictors of peripheral arterial disease.

**Keywords:** peripheral arterial disease , acute coronary syndrome, hypertension, diabetes mellitus.

*JFac Med Baghdad 2021; Vol.63, No . 2*
*Received: Mar. 2021*
*Accepted: June 2021*
*Published: July. 2021*

## Introduction:

Peripheral arterial disease is a clinical disorder in which there is stenosis or occlusion in the aorta or the arteries of the limbs. (1) Atherosclerosis is the leading cause of peripheral arterial disease (PAD) in patients>40 years old. Lower extremity PAD is common in the general population and is associated with 2 to 5-fold increased risk of future cardiovascular morbidity and mortality. (2-4) It is recognized as a coronary heart disease risk equivalent (5) and its prevalence is predicted to increase parallel to ageing of the population. (6, 7)

Approximately 12% of the adult population has PAD, and the prevalence is equal in men and women. (8) A strong association exists between advancing age and the prevalence of PAD. Almost 20% of adults older than 70 years have PAD. (9) Claudication is the symptomatic expression of PAD; however, it occurs less frequently than has been reported previously. Patients may experience classic claudication, atypical leg pain, rest pain, ischemic ulcers, gangrene, or no symptoms at all. In fact, asymptomatic disease may be present in up to 50% of patients with PAD. (10)

**Corresponding Author: osamaaltaie@gmail.com*
*Al-Hussain Teaching Hospital, Dhi Qar Health Directorate.*
***Al-Mustansiriyah University, College of Medicine, Al-Yarmook Teaching Hospital. abbasalsharifi@yahoo.com*

The most common risk factors associated with PAD are increasing age, smoking, diabetes mellitus and Hyperlipidemia. (11)

The most common conditions associated with symptoms that may be confused with claudication are spinal stenosis or lumbar radiculopathy. It is only by a detailed history that one can distinguish which of these 2 common conditions is causing the symptoms in an individual patient (Table 1). (12)

**Table1. Differentiation between intermittent claudication from pseudoclaudication:**

| Description of symptom | Intermittent claudication | Pseudoclaudication |
|---|---|---|
| Character of discomfort | Pain, tightness, cramping, heaviness, tiredness, and burning | Same plus tingling, weakness, and clumsiness |
| Location of discomfort | Buttock, hip, thigh, calf, and foot | Same |
| Exercise-induced? | Yes | Yes or no |
| Distance to claudication | Same each time | Usually variable |
| Occurs with standing | No | Yes |
| Relief | Stop walking and stand | Often must sit down or change body position |

**1. Classic claudication:** Pain, discomfort, aching, heaviness, tiredness, cramping, or burning in the calf, thigh, hip, and buttock that (1) is reproducible with similar level of walking from day to day, (2) disappears after several of standing, and (3) occurs at same distance once walking has resumed.

**2. Atypical leg pain:** Lower extremity discomfort that is exertional but doesn't consistently occur at the same distance walked and may require a longer period of time to resolve or require the patient to sit down or change body position.

**3. Asymptomatic:** Without obvious symptoms, but usually associated with functional impairment on formal testing.

Adapted from Peripheral Vascular Diseases, 2nd edition. (12)

**Patients and methods:**

A cross sectional descriptive study was conducted in the coronary care unit (CCU) at Al-Yarmouk Teaching Hospital from the 1st of January 2016 to the 1st of November 2016 where hundred and fifty (150) patients enrolled to the CCU with approved acute coronary syndrome (ACS), Exclusion criteria include death of the patient in the first 48 hours after hospital admission, and patients with ankle brachial index (ABI)>1.4.

Demographic and clinical features of the patients were assessed, including different age groups, gender, individuals with hypertension (HT), using antihypertensive drugs along with diet and /or exercise, or whose blood pressure on the day of admission >140/l90 mmhg on at least two occasions, individuals with diabetes mellitus (DM) using antidiabetic drugs (insulin, oral hypoglycemic agents), or had fasting capillary glycemia > 7.0 mmol/l (126 mg/dl) or greater on the day of admission. Individuals with hypercholesterolemia using lipid lowering agents, or had serum total cholesterol ≥ 200 mg/dl on the day of admission. Regarding smokers they have been divided into two groups (1) all patients who were regularly smoked an average of one or more cigarettes a day for at least one year was considered current smokers. (2) Patients who had given up smoking for at least at one year were considered ex-smokers and non smokers. Another parameter was included is body mass index (BMI), patients were divided into two groups (1) BMI>30 kg/m2 considered obese patients, (2) <30 kg/m2 overweight patients. Being symptomatic or non-symptomatic, family history of previous cerebrovascular disease and the evaluation of PAD through measurement of (ABI) which considered the most important parameter.

**Measurement of ABI:** Using a hand held continuous wave Doppler device with standard sphygmomanometer, measurement is done while the patient is in supine position, the higher systolic pressure measured from either posterior tibial artery or dorsalis pedis artery in each leg is divided to the highest brachial pressure taken from either arm and the lowest ABI was selected, a normal ABI is 0.9 to 1.4. A reduction in the ABI indicates reduced blood flow to the lower extremity. From 0.41 to 0.9 is considered mild to moderate obstruction, below 0.4 is considered severe obstruction. The diagnostic value of the ABI is limited in disease states that lead to non-compressibility (calcification) of blood vessels (e.g., patients with renal failure). In these circumstances, the increase in ABI (>1.40) may be an artifact, in our study the values >1.4 have been excluded.

**Statistical Analysis:**

The statistical program SPSS version 23 was used to analyze a dataset in which there are one or more independent variables that determine an outcome.

Results are reported as percentages for categorical variables and. Demographic and clinical characteristics were compared by using Pearson's Chi-square test for categorical variables and student t test or analysis of variance for continuous variables as appropriate. A two-sided P<0.05 was considered significant.

**Ethical considerations :**

An official permission was obtained from committee of Iraqi Board for Medical Specialization and Ministry Of Health. A written consent was taken from the participants. The collected data will be kept confidential and will not be used except for the study purpose.

**Results:**

A total of 150 patients were included in this study. Table 2 shows demographic/baseline risk factors of

patients with PAD. A significant association between patients with PAD and age, HT, DM, smoking, dyslipidemia, and previous Hx of CVA, (p=0.045, p=0.043, p=0.013, p=0.04, p=0.03, p=0.01 respectively. Table 2.

**Table 2: Comparison of demographic/baseline risk factors between patients with PAD and patients without PAD**

| | PAD present (n=47) | | PAD absent (n=103) | | Total (n=150) | |
|---|---|---|---|---|---|---|
| | Estimated prevalence | n | Estimated prevalence | N | N | P |
| **Age** | | | | | | |
| Up to 45 years | 15% | 7 | 23.3% | 24 | 31 | 0.045 |
| 45-59 years | 34% | 16 | 46.7% | 48 | 64 | |
| 60 years or more | 51% | 24 | 30% | 31 | 55 | |
| **Gender** | | | | | | |
| Male | 68% | 32 | 71.8% | 74 | 106 | 0.63 |
| Female | 32% | 15 | 29.2% | 29 | 44 | |
| **hypertension** | | | | | | |
| Yes | 82.9% | 39 | 67% | 69 | 108 | 0.043 |
| No | 27.1% | 8 | 33% | 34 | 42 | |
| **DM** | | | | | | |
| Yes | 38.2% | 18 | 19.4% | 20 | 38 | 0.013 |
| No | 61.8% | 29 | 80.6% | 83 | 112 | |
| **Smoking** | | | | | | |
| Current | 46.8% | 22 | 64% | 66 | 88 | 0.04 |
| None + ex | 53.2% | 25 | 36% | 37 | 62 | |
| **dyslipidemia** | | | | | | |
| Yes | 74% | 35 | 56% | 58 | 93 | 0.03 |
| No | 26% | 12 | 44% | 45 | 57 | |
| **Previous Hx. of CVA** | | | | | | |
| Yes | 21.2% | 10 | 4.8% | 5 | 15 | 0.001 |
| No | 77.8% | 37 | 95.2% | 98 | 135 | |
| **Family Hx. of CAD** | | | | | | |
| Yes | 29.7% | 14 | 34.9% | 36 | 50 | 0.53 |
| No | 70.3% | 33 | 64.1% | 67 | 100 | |
| **BMI** | | | | | | |
| ≥30 | 44.6% | 21 | 38.8% | 40 | 61 | 0.49 |
| <30 | 45.4% | 26 | 61.2% | 63 | 79 | |

Peripheral arterial disease was absent in 103 patients (68.8%) in which ABI between 0.91- 1.4, and present in 47 patients (31.2%), 32 of those patients (21.3%) had ABI between 0.90-0.70, 11 patients (7.3%) had ABI between 0.69-0.41, and 4 patients (2.6%) had ABI ≤0.40 as in (figure 1).

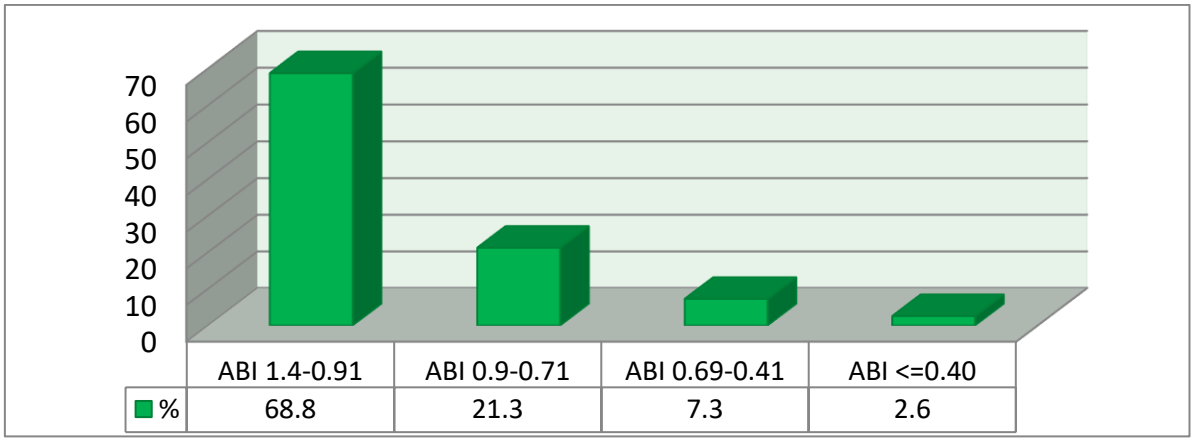


**Figure 1: Distribution of ABI values in 150 patients admitted to hospital with acute coronary syndrome.**

Symptoms of patients with PAD were included in figure2. There were 51% of patients were asymptomatic and 49% symptomatic. Of the total symptomatic patients, there were 29.8% of patients with atypical leg pain, 12.8% of patients with intermittent leg pain, and 6.4% of patients with pain at rest.

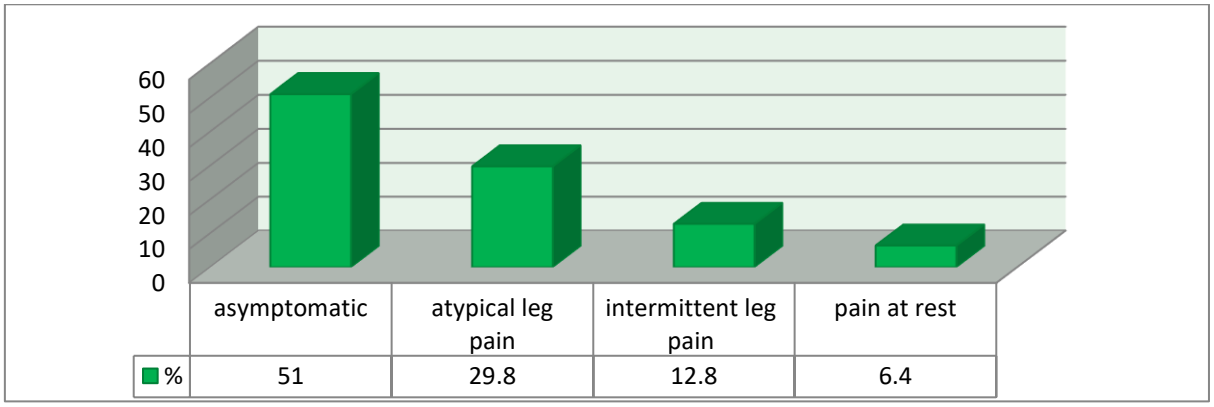


**Figure 2: Distribution of patients with PAD according to the symptoms.**

**Discussion:**

We attempted to analyze the prevalence and the relationship between PAD and ACS, the result of our study shows that prevalence of PAD in patients with ACS was 31.2% this is similar to study done in Spain where 26% of ACS patients had PAD, also another study that 35% of ACS had PAD. Although another study reported prevalence of 9.7%, another study documented extra-cardiac vascular impairment in 11.4% of patients, of whom 6.8% had PAD. The presence of PAD is probably under diagnosed in both of these studies, given that only patients with previously diagnosed disease were included, and no tests were performed to identify patients with sub-clinical PAD. (13-17) It is well recognized that a large proportion of patients with atherosclerotic disease in the lower limbs are asymptomatic,(18,19) and our results showed likewise where 51% of patients were asymptomatic this is consistent with Hirsch et al study in which patients with PAD were 50% asymptomatic(5), our study showed 29.8% were having atypical leg pain and 12.8% having intermittent leg pain and 6.4% having pain at rest this is consistent with Mcdermott MM et al where 460 patients in the Walking and Leg Circulation Study, 28.5% had atypical leg pain, 19.8% had intermittent leg pain, 32.6% had classic intermittent claudication, and 19.1% had pain at rest (20) . The ABI represents a simple, non-invasive and inexpensive procedure for estimating atherosclerotic disease in the lower limbs. In fact, the diagnosis of PAD increased significantly in our study after determining the ABI in this population. Recently, the AGATHA study (a Global Atherothrombosis Assessment) revealed the presence of an abnormal ABI (0.9) in 40% of patients with atherothrombosis (coronary, cerebral or peripheral disease) and in 31% of patients with several cardiovascular risk factors, but without previous cardiovascular disease. (21) There is a close relationship between the prevalence of PAD and age, both in the general population14 and in patients with established coronary artery disease; this is supported by our study. Actually less than half (43.6%) of the patients over 60 years in our study had PAD, this is consistent with V. Bertomeu et al study and The PARTNERS study which involved primary care patients documented a high prevalence of PAD in those aged over 60 years.(18,22,23)

Regarding hypertension, almost every study has shown a strong association between HT and PAD, in our study we have found that 82.2% of patients with PAD had HT and this is consistent with V. Bertomeu et al where 84.1% with PAD had HT and another study Olin JW et al in which patients with PAD had HT between 50% and 92 %.(23,24) Another important risk factor is DM, the risk of PAD is markedly increased among individuals with diabetes, and ischemic event rates are higher in diabetic individuals with PAD than in comparable non-diabetic populations this approved by a study done by Steven P. Marso et al. in our study we had found a significant relation between DM and PAD where 38.2% of patients had DM this is consistent with NHANES, 26% of participants with PAD were identified as having diabetes, and V. Bertomeu et al where 41.5% of patients with PAD had DM.( 20,23) Smoking have a risk of PAD, 4 times that of nonsmokers and suffer onset of symptoms almost a decade earlier. (25). Furthermore, the risk of PAD is increased with both former and current smokers, however those capable of stop smoking are less likely to have critical limb ischemia and their survival rate are improved. (26) In our study we found that relation between smoking and PAD were significant and 46.8% of PAD was smokers, this was consistent with Edith M. Willigendael study where 50% of patients with PAD were smokers. And Hirsch et al study which found that 80% of patients with PAD were current and former smokers. (10,27) Gender, most of the studies showed no significant relation in favoring male over female or vice versa, furthermore studies showed male and female were affected equally. In our

study 68% of patients with PAD were male and the P value were insignificant this consistent with V. Bertomeu study in which 69.7 % of patients with PAD were male and despite that the P value were also non-significant. (8, 23) Dyslipidemia, The risk of developing lower extremity PAD increases by approximately 5% to 10% for each 10 mg per dL rise in total cholesterol (44, 53, and 54), in our study we concluded a significant relation between PAD and dyslipidemia in which 74% of patients with PAD had dyslipidemia, this is supported by another study NHANES, greater than 60% of patients with PAD had hypercholesterolemia, where as in PARTENERS (PAD Awareness, Risk, and Treatment: New Resources for Survival) program, the prevalence of PAD of Hyperlipidemia in patients with known PAD was 77%. (18) Previous history of CVA another parameter had been taken in our study, we have found that 21.2% of patients with PAD had CVA and the relation significant (p value=0.0018), this is consistent with Bertomou et al study that 13.4% of patients with PAD had CVA and the relation was also significant. (23) Family history of CAD in our questionnaire we asked about it to identify if any hereditary strain were involved, we found that 29.7% had family HX of CAD and the relation were insignificant, bertomou et al found the relation was significant and p value<0.0001, this is may be explained by the small no. taken in our study versus to 1410 patients taken by bertomou. Yet our study was supported by myoclinic study that reveals no relation between family history of CAD and PAD. (23) BMI were measured in each patient and divide them into two categories {<30, ≥30} we found that the BMI of 44.6% patients were≥30 and the relation were insignificant P value =0.49.this is consistent with oyelada BO study and Planas A. Milos Maksimovic. (28, 29) A previous studies in Iraq has been done using ABI and concluded that the mean Ankle-Brachial Pressure index (ABI) was 0.908±0.31 (range 0- 1.53),(30) another study reported that there was no significant differences were found to exist in ABI results among the diabetic and normal groups.(31) The determination of ABI in the clinical evaluation of patients presenting with an acute coronary event may help identify patients at higher risk of developing a secondary cardiovascular event and may help us in making decisions for prevention and treatment in this population.

**Conclusion**

The prevalence of PAD in patients presenting with ACS is considerable and significant, the majority of patients were asymptomatic, and therefore it is underestimation.

**Authors' contributions:**

Dr. Osama Abdul-Rasool: Study conception, study design, data collection and analysis, interpretation of data, drafting of manuscript.

Dr. Abbass Al-Sharifi: Academic supervisor.

**References:**


1. *Harrison's principle of internal medicine 18th edition. Vascular diseases of the extremities, periphery artery disease,2011, p: 2066.*
2. *Shu J, Santulli G. Update on peripheral artery disease: Epidemiology and evidence-based facts. Atherosclerosis. 2018 Aug;275:379-381. doi: 10.1016/j.atherosclerosis.2018.05.033. Epub 2018 May 22. PMID: 29843915; PMCID: PMC6113064.*
3. *Heald CL, Fowkes FG, Murray GD, Price JF. Risk of mortality and cardiovascular disease associated with the ankle brachial index: systematic review. Atherosclerosis2006; 189(1):61e9.*
4. *Lee AJ, Price JF, Russell MJ, Smith FB, van Wijk MC,Fowkes FG. Improved prediction of fatal myocardial infarction using the ankle brachial index in addition to conventional risk factors: the Edinburgh Artery Study. Circulation 2004; 110(19):3075e80.*
5. *Hirsch AT, Haskal ZJ, Hertzer NR, Bakal CW, Creager MA, Halperin JL, et al. ACC/AHA 2005 Practice Guidelines for the management of patients with peripheral arterial disease (lower extremity, renal, mesenteric, and abdominal aortic): American Association of Cardiovascular and Pulmonary Rehabilitation; National Heart, Lung, and Blood Institute; Society for Vascular Nursing; Transatlantic Inter Society Consensus; and Vascular Disease Foundation.Circulation2006;113(11):e463ee654.*
6. *Saenz-Pipaon G, Martinez-Aguilar E, Orbe J, González Miqueo A, Fernandez-Alonso L, Paramo JA, Roncal C. The Role of Circulating Biomarkers in Peripheral Arterial Disease. Int J Mol Sci. 2021 Mar 30;22(7):3601. doi: 10.3390/ijms22073601. PMID: 33808453; PMCID: PMC8036489.*
7. *Song P, Rudan D, Zhu Y. Global, regional, and national prevalence and risk factors for peripheral artery disease in 2015: an updated systematic review and analysis. Lancet Glob Health 2019;7:e1020-30.*
8. *Hiatt WR. Medical treatment of peripheral arterial disease and claudication. N Engl J Med. 2001; 344(21):1608-1621.*
9. *Regensteiner JG, Hiatt WR. Current medical therapies for patients with peripheral arterial disease: a critical review. Am J Med. 2002; 112(1):49-57.*
10. *Jindeel A (2017) Claudication: A Teachable Moment or Missed Opportunity. Clin Med Rev. Case Rep 4:186. doi.org/10.23937/2378-3656/1410186*
11. *Ammendolia C. Degenerative lumbar spinal stenosis and its imposters: three case studies. J Can Chiropr Assoc. 2014 Sep;58(3):312-9. PMID: 25202160; PMCID: PMC4139768. Norgren L,*
12. *Hiatt WR, Dormandy JA, Nehler MR, Harris KA, Fowkes FG; TASC II Working Group. Intersociety consensus for the management of peripheral arterial disease (TASC II). J Vasc Surg. 2007; 45(suppl S):S5-S67.*
13. *Huelmos A, Jimenez J, Guijarro C, Belinchon JC, Puras E, Sanchez C, et al. Under recognized peripheral arterial disease in patients with acute coronary syndrome: prevalence of traditional and*

*emergent cardiovascular risk factors. Rev EspCardiol2005; 58:1403e10.*

*14. Mehlsen J, Wiinberg N, Joergensen BS, Schultz-Larsen P. 2010. High prevalence of peripheral arterial disease in patients with previous cerebrovascular or coronary event.*

*15. Froelich JB, Mukherjee D, Avezum A, Budaj A, Kline-Rogers EM,Lopez-Sendon J, et al. Association of peripheral artery disease with treatment and outcomes in acute coronary syndromes. The Global Registry of Acute Coronary Events (GRACE).Am Heart J2006; 151:1123e8.*

*16. Cotter G, Cannon CP, McCabe CH, Michowitz Y, Kaluski E, Charlesworth A, et al. Prior peripheral arterial disease and cerebrovascular disease are independent predictors of adverse outcome in patients with acute coronary syndromes: are we doing enough? Results from the Orbofiban in Patients with Unstable Coronary Syndromes-Thrombolytic in Myocardial Infarction (OPUS-TIMI) 16 study. Am Heart J2003; 145:622e7.*

*17. Hirsch AT, Criqui MH, Treat-Jacobson D, et al. Peripheral Arterial Disease Detection, Awareness, and Treatment in Primary Care. JAMA. 2001;286(11):1317–1324. doi:10.1001/jama.286.11.1317*

*18. Brevetti G, Oliva G, Silvestro A, Scopacasa F, Chiariello M. Prevalence, risk factors and cardiovascular comorbidity of symptomatic peripheral arterial disease in Italy. Atherosclerosis 2004; 175:131e8.*

*19. McDermott MM, Greenland P, Liu K, Guralnik JM, Celic L, Criqui MH, Chan C, Martin GJ, Schneider J, Pearce WH, Taylor LM, Clark E. The ankle brachial index is associated with leg function and physical activity: the Walking and Leg Circulation Study. Ann Intern Med. 2002 Jun 18;136(12):873-83.*

*20. Fowkes FG, Low LP, Tuta S, Kozak J. Ankle-brachial index and extent of atherothrombosis in 8891 patients with or at risk of vascular disease: results of the international AGATHA study. Eur Heart J2006; 27:1861e7.*

*21. Aboyans V, Lacroix P, Postil A, Guilloux J, Rolle F, Cornu E, et al. Subclinical peripheral arterial disease and incompressible ankle arteries are both long-term prognostic factors in patients undergoing coronary artery bypass grafting.J Am Coll Cardiol 2005;46:815e20.*

*22. Bertomeu V, Morillasa P. 2008. Prevalence and Prognostic Influence of Peripheral Arterial Disease in Patients>40 Years Old Admitted into Hospital Following an Acute Coronary Event.*

*23. Olin JW. Hypertension and peripheral arterial disease. Vasc Med. 2005; 10(3):241-246.*

*24. Steven P. Marso SP, William R. Hiatt WR. Peripheral Arterial Disease in Patients with Diabetes. J Am Coll Cardiol. 2006 Mar, 47 (5) 921–929*

*25. Selvin E, Hirsch AT. Contemporary risk factor control and walking dys-function in individuals with peripheral arterial disease: NHANES 1999-2004. Atherosclerosis. 2008; 201(2):425-433.*

*26. Edith M. Willigendael, MD, Influence of smoking on incidence and prevalence of peripheral arterial disease 2004.*

*27. Oyelade BO, Olaolorun AD, Odeiga LO, Amole IO et al, the relationship between obesity and peripheral arterial disease in adult Nigerian diabetics 2014.*

*28. Planas A, Clara A, Pou J, Vidal-Barraquer F, Gasol A, Moner A, Contreras C, Marrugat J. (2001). Relationship of obesity distribution to peripheral arterial occlusive disease in elderly men. International journal of obesity and related metabolic disorders : journal of the International Association for the Study of Obesity. 25. 1068-70. 10.1038/sj.ijo.0801638.*

*29. Milos maksimovic, whether obesity is associated with peripheral arterial disease 2013.*

*30. Al Saffar H, Al Ghizzi H, Muhammed S. The Ankle- Brachial Pressure Index AS A Predictor of Coronary Artery Disease Severity. JFacMedBagdad [Internet]. 1Oct.2009 [cited 13Mar.2021];51(3):254-8. Available from: https://iqjmc.uobaghdad.edu.iq/index.php/19JFacMedBaghdad36/article/view/1119*

*31. AL-Siaidy W, AL-Sabbagh A, AL-Karawi I, Mohammed D. Evaluation of Ankle-Brachial Pressure Index and Carotid Intima Media Thickness by Doppler Ultrasound in type two Diabetics. JFacMedBagdad [Internet]. 1Apr.2013 [cited 13Mar.2021];55(1):77-2. Available from: https://iqjmc.uobaghdad.edu.iq/index.php/19JFacMedBaghdad36/article/view/675*

# انتشار مرض الشرايين المحيطية بين مرضى متلازمة الشريان التاجي الحادة, عينة من المرضى العراقيين في مستشفى اليرموك التعليمي 2016

**د.أسامة عبد الرسول**
**د. عباس الشريفي**

**الخلاصة**
**الخلفية:** لقد ارتبطت نسبة كبيرة من المرضى المصابين بأمراض القلب الإقفارية بمرض الشرايين المحيطية ، ومع ذلك لا يزال نظامنا الصحي يستخف بها لأن العديد من المرضى لا يعانون من أعراض ولا تزال هذه الحالة قيد التشخيص وبالتالي لا يتم علاجها.
**الهدف**: دراسة انتشار أمراض الشرايين المحيطية في الأطراف السفلية لدى مرضى متلازمة الشريان التاجي الحادة وارتباطها بعوامل خطر معينة.
**المنهجية**: أجريت دراسة وصفية مقطعية في وحدة العناية التاجية في مستشفى اليرموك التعليمي من 1 يناير 2016 إلى 1 نوفمبر 2016 حيث شارك مائة وخمسون (150) مريضًا بوحدة العناية المركزة التاجية. تم تقييم مرض الشرايين المحيطية من خلال تقييم عوامل الخطر الديموغرافية والسمات السريرية للمرضى ، بما في ذلك الفئات العمرية والجنس و ارتفاع ضغط الدم و مرض السكري والتدخين وخلل شحميات الدم والتاريخ المرضي للعائلة. ، : حادث وعائي دماغي سابق ، ألم الساق ، قياس مؤشر الكاحل العضدي باستخدام جهاز دوبلر الموجي المستمر باليد.
**النتائج**: في 150 مريضاً من مرضى متلازمة الشريان التاجي الحادة تم تضمين الذكور (70.7٪) ، ووجد مرض الشرايين المحيطية في 31.2٪ من خلال قياس مؤشر الكاحل العضدي ، و 51٪ من هؤلاء المرضى كانوا بدون أعراض و 29.8٪ يعانون من آلام غير نمطية في الساق و 12.8٪ يعانون من آلام متقطعة في الساق و 6.4. ٪ لديهم ألم أثناء الراحة. وكان مستوى مؤشر الكاحل العضدي في 150 مريضًا مصابًا ب متلازمة الشريان التاجي 68.8٪ طبيعي (ABI = 1.4-0.91) و 21.3٪ (ABI = 0.9-0.71) و 7.3٪ (ABI = 0.69-0.41) و 2.6٪ (ABI≤0.40).
العوامل المرتبطة باعتلال الشرايين المحيطية هي الشيخوخة (< 60 سنة) والتي تشكل 51٪ وقيمة p 0.013 ، والتدخين الذي يشكل 46.8٪ وقيمة P كانت 0.04 ، و عسر شحميات الدم الذي يشكل 74٪ وقيمة P 0.03 ، وأخيراً : حادث وعائي دماغي الذي يشكل 21.2٪ وقيمة P 0.0018.
**الاستنتاج**: انتشار اعتلال الشرايين المحيطية في المرضى الذين يعانون من متلازمة الشريان التاجي كبير ومهم ، وكان غالبية المرضى بدون أعراض ، وهو مرتبط بزيادة مخاطر الإصابة بأمراض القلب والأوعية الدموية. كانت عوامل مثل الشيخوخة ، و ارتفاع ضغط الدم والسكري، والتدخين ، و : حادث وعائي دماغي سابق ، و اختلال نسبة الدهون ، تنبئ بقوة باعتلال الشرايين المحيطية.
**الكلمة المفتاحية**: الانتشار ، أمراض الشرايين المحيطية ، متلازمة الشريان التاجي الحادة ، ارتفاع ضغط الدم ، داذ السكري