

Time trends in peripheral artery disease incidence, prevalence, and secondary preventive therapy: a cohort study in The Health Improvement Network in the UK

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Supplementary materials

Supplementary Table S1 Read codes indicative of a symptomatic PAD diagnosis and/or related surgical procedures

| Read code | Descriptor |
|------------------|---|
| G700.11 | Aorto-iliac disease |
| G702.00 | Extremity artery atheroma |
| G702z00 | Extremity artery atheroma NOS |
| G73..11 | Peripheral ischaemic vascular disease |
| G73..12 | Ischaemia of legs |
| G73..13 | Peripheral ischaemia |
| G730100 | Raynaud's phenomenon |
| G731000 | Buerger's disease |
| G731100 | Presenile gangrene |
| G732.00 | Peripheral gangrene |
| G732000 | Gangrene of toe |
| G732100 | Gangrene of foot |
| G733.00 | Ischaemic foot |
| G734.00 | Peripheral arterial disease |
| G73y.00 | Other specified peripheral vascular disease |
| G73y000 | Diabetic peripheral angiopathy |
| G73y100 | Peripheral angiopathic disease EC NOS |
| G73yz00 | Other specified peripheral vascular disease NOS |
| G73z.00 | Peripheral vascular disease NOS |
| G73z000 | Intermittent claudication |
| G73z011 | Claudication |
| G73z012 | Vascular claudication |

| | |
|---------|--|
| G73z100 | Spasm of peripheral artery |
| G73zz00 | Peripheral vascular disease NOS |
| G74..00 | Arterial embolism and thrombosis |
| G74..11 | Arterial embolus and thrombosis |
| G74..12 | Thrombosis – arterial |
| G74..13 | Arterial embolic and thrombotic occlusion |
| G740.12 | Aortoiliac obstruction |
| G740.13 | Leriche's syndrome |
| G742400 | Embolism and thrombosis of the femoral artery |
| G742500 | Embolism and thrombosis of the popliteal artery |
| G742600 | Embolism and thrombosis of the anterior tibial artery |
| G742700 | Embolism and thrombosis of the dorsalis pedis artery |
| G742800 | Embolism and thrombosis of the posterior tibial artery |
| G742900 | Embolism and thrombosis of a leg artery NOS |
| G742B00 | Post radiological embolism of lower limb artery |
| G742z00 | Peripheral arterial embolism and thrombosis NOS |
| G74y000 | Embolism and/or thrombosis of the common iliac artery |
| G74y100 | Embolism and/or thrombosis of the internal iliac artery |
| G74y200 | Embolism and/or thrombosis of the external iliac artery |
| G74y300 | Embolism and thrombosis of the iliac artery unspecified |
| G74z.00 | Arterial embolism and thrombosis NOS |
| G761.00 | Stricture of artery |
| G765.00 | Necrosis of artery |
| G76A.00 | Arterial insufficiency |
| G76z.00 | Disorders of arteries and arterioles NOS |
| G76z000 | Iliac artery occlusion |
| G76z100 | Femoral artery occlusion |
| G76z200 | Popliteal artery occlusion |
| G7y..00 | Other specified arterial, arteriole or capillary disease |
| G7z..00 | Arterial, arteriole and capillary diseases NOS |
| 14NB.00 | H/O: Peripheral vascular disease procedure |
| 2I16.00 | O/E - gangrene |
| R054.00 | [D]Gangrene |

R054200 [D]Gangrene of toe in diabetic
R054300 [D]Widespread diabetic foot gangrene
8HIP.00 Referred for peripheral artery disease assessment

D, diagnosis; EC, elsewhere classified; H/O, history of; O/E, on examination; NOS, not otherwise specified; PAD, peripheral artery disease.

Supplementary Table S2 Trends from 2000 to 2014 in peripheral artery disease incidence, overall and according to history of IHD at baseline

| Year | Overall | IHD | No IHD |
|---------------------------------|------------------|-------------------|------------------|
| 2000 | | | |
| Population, n | 540 918 | 67 713 | 473 205 |
| Cases, n | 1891 | 575 | 1316 |
| Person-years | 490 553 | 61 463 | 429 089 |
| Incidence (95% CI) [*] | 38.5 (36.8–40.3) | 93.5 (86.2–101.5) | 30.7 (29.0–32.4) |
| 2005 | | | |
| Population, n | 1 008 929 | 121 781 | 887 148 |
| Cases, n | 2635 | 789 | 1846 |
| Person-years | 949 911 | 114 885 | 835 026 |
| Incidence (95% CI) [*] | 27.7 (26.7–28.8) | 68.7 (64.0–73.6) | 22.1(21.1–23.1) |
| 2010 | | | |
| Population, n | 1 219 901 | 132 092 | 1 087 809 |
| Cases, n | 2211 | 592 | 1619 |
| Person-years | 1 135 809 | 122 635 | 1 013 174 |
| Incidence (95% CI) [*] | 19.5 (18.7–20.3) | 48.3 (44.5–52.3) | 16.0 (15.2–16.8) |
| 2014 | | | |
| Population, n | 1 306 192 | 126 031 | 1 180 161 |
| Cases, n | 2050 | 499 | 1551 |
| Person-years | 1 182 588 | 114 760 | 1 067 828 |
| Incidence (95% CI) [*] | 17.3 (16.7–18.1) | 43.5 (39.8–47.5) | 14.5 (13.8–15.3) |

*Incidence per 10 000 person-years.

CI, confidence interval; IHD, ischaemic heart disease.

Supplementary Table S3 Characteristics of patients with incident peripheral artery disease diagnosed in the years 2000, 2005, 2010, and 2014

| Characteristic | Year 2000 | Year 2005 | Year 2010 | Year 2014 |
|---|------------------|------------------|------------------|------------------|
| | (n=1891) | (n=2635) | (n=2211) | (n=2050) |
| | n (%) | n (%) | n (%) | n (%) |
| Sex | | | | |
| Male | 1106 (58.5) | 1542 (58.5) | 1393 (63.0) | 1267 (61.8) |
| Female | 785 (41.5) | 1093 (41.5) | 818 (37.0) | 783 (38.2) |
| Age, years | | | | |
| 50–59 | 260 (13.7) | 412 (15.6) | 368 (16.6) | 361 (17.6) |
| 60–69 | 537 (28.4) | 762 (28.9) | 708 (32.0) | 636 (31.0) |
| 70–79 | 745 (39.4) | 950 (36.1) | 688 (31.1) | 631 (30.8) |
| 80–89 | 349 (18.5) | 511 (19.4) | 447 (20.2) | 422 (20.6) |
| Body mass index,* kg/m² | | | | |
| 15–19 | 87 (5.8) | 150 (6.5) | 142 (6.8) | 132 (6.7) |
| 20–24 | 539 (36.1) | 718 (31.0) | 626 (30.2) | 559 (28.5) |
| 25–29 | 581 (38.9) | 919 (39.7) | 761 (36.7) | 705 (35.9) |
| ≥30 | 286 (19.2) | 527 (22.8) | 546 (26.3) | 567 (28.9) |
| Smoking status* | | | | |
| Current smoker | 672 (39.5) | 922 (35.4) | 771 (35.0) | 731 (35.7) |
| Former smoker | 454 (26.7) | 1095 (42.0) | 1033 (46.8) | 930 (45.4) |
| Never smoked | 575 (33.8) | 588 (22.6) | 402 (18.2) | 388 (18.9) |
| Alcohol use, units/week* | | | | |
| None | 310 (20.7) | 490 (21.7) | 403 (20.7) | 344 (18.7) |
| 1–4 | 799 (53.3) | 1113 (49.2) | 913 (46.8) | 895 (48.7) |
| 5–9 | 243 (16.2) | 401 (17.7) | 385 (19.7) | 329 (17.9) |
| 10–15 | 95 (6.3) | 159 (7.0) | 143 (7.3) | 177 (9.6) |
| ≥20 | 53 (3.5) | 98 (4.3) | 107 (5.5) | 94 (5.1) |
| Number of prescription medications | | | | |
| ≤1 | 773 (40.9) | 910 (34.5) | 711 (32.2) | 624 (30.4) |

| Characteristic | Year 2000 | Year 2005 | Year 2010 | Year 2014 |
|-----------------------|------------------|------------------|------------------|------------------|
| | (n=1891) | (n=2635) | (n=2211) | (n=2050) |
| | n (%) | n (%) | n (%) | n (%) |
| 2–4 | 635 (33.6) | 746 (28.3) | 568 (25.7) | 520 (25.4) |
| ≥5 | 483 (25.5) | 979 (37.2) | 932 (42.2) | 906 (44.2) |
| Comorbidities | | | | |
| MI | 261 (13.8) | 375 (14.2) | 281 (12.7) | 262 (12.8) |
| IHD without MI | 483 (25.5) | 638 (24.1) | 470 (21.3) | 386 (18.8) |
| Heart failure | 204 (10.8) | 243 (9.2) | 161 (7.3) | 178 (8.7) |
| Atrial fibrillation | 175 (9.3) | 276 (10.5) | 297 (13.4) | 250 (12.2) |
| Ischaemic stroke | 145 (7.7) | 182 (6.9) | 177 (8.0) | 184 (9.0) |
| TIA | 173 (9.1) | 190 (7.2) | 158 (7.1) | 147 (7.2) |
| Hyperlipidaemia | 204 (10.8) | 243 (9.2) | 161 (7.3) | 178 (8.7) |
| Diabetes mellitus | 383 (20.3) | 677 (25.7) | 593 (26.8) | 589 (28.7) |
| COPD | 193 (10.2) | 300 (11.4) | 318 (14.4) | 352 (17.2) |
| Asthma | 237 (12.5) | 400 (15.2) | 422 (19.1) | 424 (20.7) |
| Cancer | 199 (10.5) | 343 (13.0) | 349 (15.8) | 370 (18.0) |
| Depression | 366 (19.4) | 602 (22.8) | 563 (25.5) | 582 (28.4) |
| Dementia | 256 (13.5) | 439 (16.7) | 464 (21.0) | 495 (24.1) |

*Excluding patients for whom this information was not known (overall, data on smoking status and alcohol use were missing for 2.6% and 14.1% of patients, respectively).

COPD, chronic obstructive pulmonary disease; IHD, ischaemic heart disease; MI, myocardial infarction; TIA, transient ischaemic attack.

Figure legend

Supplementary Figure S1 Time trends in the proportions of patients prescribed statin therapy in the 12 months before and 12 months after an incident diagnosis of PAD, with data for 2012–2014 restricted to primary care practices with at least 1 year of follow-up from the start date

Shaded area highlights the 2 months before and after the PAD diagnosis.

PAD, peripheral artery disease.