Primary care screening for cardiovascular risk factors in patients with psoriasis


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BACKGROUND: Studies suggesting that patients with psoriasis have an excess of risk factors for cardiovascular disease (CVD) have been limited by selection bias, inappropriate choice of control groups or reliance on risk factors measured for clinical reasons. There are no primary case-based data describing the proportion of patients with psoriasis who have screen-detected abnormal CVD risk factors.

STUDY AIMS: Our aims were to: a) describe the impact of screening on the prevalence of abnormal CVD risk factors in patients with psoriasis identified from non-specialist practices; b) assess whether screen-detected CVD risk factor levels or CVD risk varies by age, the severity of psoriasis or the presence of psoriatic arthritis (PsA); and c) calculate the expected impact of normalising modifiable risk factors.

METHODS: We performed screening for CVD risk factors in 287 primary care-based patients with psoriasis from diverse social backgrounds (mean (SD) age 53 (15) years; 57% female; 94% white British; 22% with severe disease (self-assessed Psoriasis Area Severity Index >10 or disease modifying therapy); 33% with reported PsA).

RESULTS: Screen-detected (not previously known) hypertension (blood pressure ≥140 or / ≥90 mm Hg) was found in 13% of participants; hypercholesterolaemia (total cholesterol >5 mmol/L) in 37%, diabetes (HbA1c ≥48 mmol/mol) in 3% and chronic kidney disease (estimated glomerular filtration rate <60 ml/min) in 5%. At least one abnormal risk factor was found in 48% of attendees. The prevalence of screen-detected abnormal risk factors was not significantly associated with age <40 years, prevalent severe psoriasis or PsA. In participants receiving treatment for known CVD risk factors, a high proportion had suboptimal levels - blood pressure >140/90 mmHg: 46/99 (46%); total cholesterol >5 mmol/L: 42/92 (47%) and HbA1c >53 mmol/mol: 5/19 (26%). One in three patients (37%) not designated to be at high risk (e.g. people with CVD) were found to have a high (>10%) 10-year CVD risk as assessed by QRISK2. The reporting of PsA was linked to a 77% higher predicted 10-year CVD risk (14.0% (PsA) vs. 7.9% (no PsA), p=0.0002). In patients with PsA, the QRISK2 calculator predicted that risk factor optimisation would reduce the absolute risk of a CVD event by 2.2% over 10 years - yielding a number needed to treat to prevent one vascular event of 45 patients (100/2.2).

CONCLUSION: In conclusion, CVD risk factor screening in primary case-based patients with psoriasis identified many high-risk individuals with newly detected modifiable risk factors who could benefit from intervention - especially those with PsA.