Out of Hours

Psoriasis and cardiovascular risk assessment in primary care

INTRODUCTION

Psoriasis is a common disease affecting approximately 2.5% of the UK population. It has been traditionally thought of as a chronic inflammatory skin disease, but recent research suggests that psoriasis is a disorder of systemic inflammation with chiefly cutaneous and joint manifestations. Several cardiometabolic manifestations of this systemic inflammatory process are now well recognised, including ischaemic heart disease,[1,2] cerebrovascular accident,[2] diabetes,[3] hypercholesterolaemia,[4] and hypertension.[5] In addition patients with psoriasis have a higher incidence of smoking and obesity.[6]

In October 2012 the National Institute for Health and Care Excellence published a clinical guideline on psoriasis in which it recommends that every patient with psoriasis should have a cardiovascular risk assessment.[7] We thought that primary care would be a good environment to test this recommendation.

METHOD

In January 2013 we ran a search in a West Yorkshire general practice with 10 037 patients to ascertain the number coded as having psoriasis. The prevalence of cardiometabolic conditions and risk factors in those patients with psoriasis was also ascertained and compared with the prevalence in the general practice population using the Quality and Outcomes Framework (QOF). Patients with pre-existing ischaemic heart disease, cerebrovascular accident, diabetes, hypercholesterolaemia, and hypertension were excluded. We then focused on patients aged 40–74 years because they are eligible for an NHS Health Check, which includes a cardiovascular risk assessment using the Q-RISK®2 cardiovascular risk calculator.

RESULTS

We identified 277 patients with psoriasis, a prevalence of 2.76%. There was a significantly increased incidence of established cardiovascular disease (6.6% versus 4.6%, $P = 0.027$), cerebrovascular accident (4.3% versus 2.2%, $P = 0.009$) and diabetes (10.9% versus 5.1%, $P \leq 0.0001$) in the patients with psoriasis compared to those without. Additionally, much higher rates of obesity (27.9% versus 20.4%, $P \leq 0.0009$) and cigarette smoking (30.1% versus 18.7%, $P \leq 0.0009$) were present in patients with psoriasis than those without. However, there was not an increased prevalence of hypertension in those patients with psoriasis compared to those without (20.0% versus 19.1%, $P = 0.083$).

Those patients with psoriasis who had not previously attended for an NHS health check were invited to do so. Two postal letters were sent and two rounds of cold calling took place over a period of 6 months. Those patients attended the surgery for assessment of blood pressure, smoking status, BMI calculation, and blood testing for estimation of urea and electrolytes, lipid profile, and random glucose. When the results were available a cardiovascular risk assessment was undertaken using the Q-RISK2 calculator. After invitation for assessment 47 patients attended the surgery for their NHS health check. These patients had significantly higher rates of smoking (39%), obesity (30%), and high blood pressure (25%). Additionally, patients with heightened cardiovascular risk (10%) and with hypercholesterolaemia (2.5%) were identified. There were no new patients with diabetes. Most importantly, all of these patients have received interventions that are known to prevent cardiovascular events, such as stroke and myocardial infarction.

CONCLUSION

Cardiovascular risk assessment should be done in primary care for many reasons. Firstly, computer systems in primary care readily calculate cardiovascular risk within minutes, something unlikely to happen in a secondary care dermatology clinic. Also, GPs are better equipped to deal with borderline high and high blood pressure, providing dietary guidance and advice on the initiation of statin treatment for those at the highest cardiovascular risk. We therefore recommend that patients with psoriasis have a cardiovascular risk assessment in a primary care setting as it is worthwhile in terms of addressing and modifying cardiovascular risk factors.

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Patient consent
The patient gave consent for the publication of this image.

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