Psoriasis and the Heart

A positive approach to psoriasis and psoriatic arthritis
Psoriasis and the Heart

This leaflet has been written to help you understand more about the psoriasis-heart connection and includes what you can change, what you cannot change, recognising the warning signs and taking action to help reduce your risk.

What is psoriasis?

Psoriasis (sor-i’ah-sis) is a long-term (chronic) scaling disease of the skin, which affects 2-3% of the UK population. It usually appears as red, raised, scaly patches known as plaques. Any part of the skin surface may be involved but the plaques most commonly appear on the elbows, knees and scalp. It can be itchy but is not usually painful. Nail changes, including pitting and ridging, are present in 40% to 50% of people with psoriasis alone. 10% to 20% of people with psoriasis will develop psoriatic arthritis. There does not seem to be any link between the severity of the psoriasis affecting the skin and the severity of psoriatic arthritis. For more detailed information on psoriasis see our leaflets What is Psoriasis? and What is Psoriatic Arthritis?

What happens in psoriasis?

Normally a skin cell matures in 21-28 days and during this time it travels to the surface, where it is lost in a constant, invisible shedding of dead cells. In patches of psoriasis the turnover of skin cells is much faster, around 4-7 days, and this means that even live cells can reach the surface and accumulate with dead cells. This process is the same wherever it occurs on the body. The extent of psoriasis and how it affects an individual varies from person to person. Some may be mildly affected with a tiny patch hidden away which does not bother
them, while others may have large, visible areas of skin involved that significantly affect daily life and relationships. Psoriasis is not contagious, you cannot catch it from another person. The cause of psoriasis is currently unknown.

Heart (cardiovascular) disease

Heart disease is the second most commonly reported long-term disease, after musculoskeletal conditions, in the UK. In the general population, 1.5 million men and 1.1 million women are affected. The prevalence increases for those aged 75 or older, to 1 in 4 men and 1 in 5 women.

The most common form of disease that involves the heart and blood vessels is hardening of the arteries (atherosclerosis). It occurs when cholesterol and fatty deposits clog the blood vessels, slowing blood flow and preventing the delivery of oxygen and nutrients to the heart, brain and other organs. This may result in angina, heart attack or stroke. Heart disease can be life-threatening. There are lots of risk factors for developing heart disease, many of which can be avoided or minimised.

The psoriasis-heart connection

The major risk factors for heart disease include diabetes, obesity, high blood pressure (hypertension), and increased low-density lipoprotein (LDL), often known as bad cholesterol. Research shows that risk factors for heart disease are more frequently found in people with psoriasis than in people without the condition. It is unclear why this is the case but it may explain why there can be an increased rate of heart disease in people with psoriasis. People with psoriasis may also be more likely to make lifestyle choices which increase their heart disease risk further. The good news is that you can take action against many of these risk factors and reduce your risk of heart disease.

Medical research has also found that psoriasis itself may be a risk factor for developing heart disease. In one
study, young people with severe psoriasis were three times more likely to have a heart attack than those of the same age who did not have psoriasis. Research from the UK has suggested that the risk of heart disease is greater for those who have psoriasis and inflammatory arthritis. However, other studies have reported that people with psoriasis have no additional risk of heart disease due to their psoriasis. There is currently a considerable amount of research being undertaken to explore the psoriasis-heart connection more fully.

What you can change

You may be able to reduce your risk of heart disease by doing something about the following issues.

High blood pressure: High blood pressure or hypertension (consistently above 140/90 mmHg) can narrow and eventually block the blood vessels that carry blood around your body. It also places additional strain on the heart, with the potential to lead to a heart attack. Very high blood pressure can result in blood vessels in the brain bursting, causing a stroke. Hypertension often has no symptoms, so be sure to have your blood pressure checked every year.

High blood cholesterol: Cholesterol and triglycerides are types of fat that are vital to healthy cell function, but they can also block and narrow the blood vessels, leading to a heart attack or stroke. High cholesterol levels are associated with high-fat diets, smoking, inactivity and a family history of high cholesterol. Eating a balanced diet, being physically active, not smoking and reducing salt and alcohol consumption can significantly reduce your cholesterol levels. Some people may also require medication to control their blood cholesterol. It is important to note that cholesterol is
produced by the liver and despite low cholesterol diets some people still require medication to help reduce blood cholesterol levels. At the present time, the target healthy cholesterol level is the same for individuals with and without psoriasis.

Physical inactivity: Being inactive can double your risk of heart attack and stroke. You don’t have to exercise strenuously to enjoy the health benefits. Start with a goal of 30 minutes of daily activity, such as walking or gardening. Gradually increase the amount and intensity. If activity causes pain or if you are unsure about embarking on any exercise programme, consult your doctor. It may also be helpful to read our leaflet Physiotherapy and Exercise: Psoriatic Arthritis.

Diabetes: It is essential that you manage your blood sugar level carefully if you have diabetes, as more than 80% of people with diabetes die of heart disease.

Excess weight: Your weight can put you at risk of developing heart disease, as well as developing high blood pressure, high cholesterol and diabetes. People who carry weight around their middle (apple-shaped) versus around their hips (pear-shaped) are at greater risk of heart problems. Even a modest reduction in weight – as little as 10% – can significantly reduce your chances of having a heart attack or stroke or developing diabetes, as well as improving your overall wellbeing.

Smoking: Stopping smoking is one of the most important steps to take for a healthy heart. The health risks associated with smoking include atherosclerosis, an increased risk of blood clots, reduced oxygen in the blood, increased blood pressure and cholesterol, and heart disease.
Excessive alcohol consumption: There is some evidence that a moderate amount of alcohol (particularly red wine) may be good for your heart; however, too much alcohol can contribute to various health problems, including heart disease. If you do drink alcohol, limit yourself to no more than one or two standard drinks (one pint of regular strength lager; one 5-oz glass of wine; 1-oz of spirits) a day and to a weekly maximum of nine drinks for women and fourteen drinks for men. Remember: for certain medications you will be advised to avoid alcohol (for example methotrexate), so do make sure your healthcare provider is aware of your alcohol consumption.

Stress: Stress presents double trouble for people with psoriasis, increasing not only your risk of heart disease, but also psoriasis flares. It is important to learn how to reduce and deal with your stress in a healthy way rather than resorting to unhealthy strategies such as smoking, drinking and overeating. Exercise, yoga and relaxation techniques can be effective. However, there are many ways you can engage in healthy stress release, such as listening to music, meeting with friends or pursuing a hobby. You may also wish to talk to your doctor about counselling or medication.

What you cannot change

Some risk factors for heart disease cannot be changed. These include:

- Gender: Men over the age of 55 and postmenopausal women are at the greatest risk of heart disease.
• **Increasing age:** The risks of heart attacks and stroke increase with age.

• **Ethnicity:** People of African or South Asian descent are more likely to have diabetes and high blood pressure and are therefore at greater risk of heart disease and stroke

• **Family history:** If a brother, sister or parent developed heart disease before the age of 55 or had a stroke before the age of 65, you are statistically at higher risk.

If you are worried about any of the issues outlined above, talk to your doctor or healthcare advisor, who will be able to provide you with reassurance and explanations of your individual risk factors.

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**Are you concerned?**

If you have any of the risk factors for heart disease that you cannot change, it is especially important to try to reduce those risks which you can change.

If you are worried about any of the issues outlined above, talk to your doctor or healthcare advisor, who will be able to provide you with reassurance and explanations of your individual risk factors.

Your doctor may measure your blood pressure or take some blood tests. Often these are performed in the morning after an overnight fast. Your doctor may check your blood glucose or cholesterol levels. Depending on your risk factors for heart disease, you may be prescribed medication to help you. Some medications, collectively called statins, which can help control cholesterol, have several additional health benefits. Other possible medications, known as beta-blockers, are helpful for blood pressure but can cause worsening of psoriasis. If a new medication seems to be affecting you in an adverse way, please consult your doctor immediately.
Some medications for the treatment of psoriasis can cause high blood pressure (ciclosporin) or change the levels of triglycerides/cholesterol (acitretin). If your dermatologist is considering these medications, he or she will check your blood pressure and take blood tests regularly.

Angina

- **Pain:** Discomfort or pain, generally in the chest, neck, jaw and/or shoulder that can be triggered by physical activity but eased by rest. The pain may feel like a heaviness, tightness or pressure.

- **Shortness of breath** (with or without chest pain): Generally triggered by physical activity and relieved by rest.

If you notice these symptoms seek the attention of your GP as soon as possible.

Heart attack:

- A heart attack may begin with the angina-like symptoms described above (pain and shortness of breath). The pain is usually very severe, comes on suddenly and does not go away with rest.

- Nausea, indigestion or vomiting.

- Sweating or cool, clammy skin.

- Feelings of fear or anxiety.

Stroke:

- Sudden weakness or sudden numbness in the face, arm or leg, especially on one side of the body, even if temporary.

- Sudden confusion or difficulty speaking or understanding, even if temporary.

- Trouble seeing with one or both eyes.

If you notice symptoms suggestive of a heart attack or stroke, seek emergency medical attention as soon as possible.
Take action!

• Do not smoke. If you are a smoker, take steps to reduce the amount you smoke.

• Maintain a healthy weight. If your waist measures more than 102 centimetres (40 inches) for men or 88 centimetres (35 inches) for women, talk to your GP about weight loss strategies.

• Eat a balanced diet, including whole grains, cereals, vegetables, fruit, lower-fat dairy products, leaner meats and food prepared with little to no fat. Avoid saturated and trans-fats; instead use olive oil, which is high in desirable monounsaturated fats.

• Control your portion sizes. An easy method for determining meal portions is to use two open hands as your measure for vegetables; one closed hand for carbohydrates, such as pasta or rice; one closed hand for fruit; the palm of your hand for meat or protein alternative; and the tip of your thumb for fats, such as oil, margarine or butter.

Portion size

• Limit alcohol intake.

• Deal with stress in a healthy way.

• Be physically active for at least 30 minutes most days of the week.

• Drink more water. Although there is no strict guideline, replacing fluids is important and you should aim to drink at least 2-3 litres of water a day, particularly during warm or hot weather.
References


www.diabetes.co.uk


Further references used in production of PAPAA information can be found at: www.papaa.org/resources/references

About this information

This material was produced by PAPAA. Please be aware that research and development of treatments is ongoing.

For the latest information or any amendments to this material please contact us or visit our website:
www.papaa.org The site contains information on treatments and includes patient experiences and case histories.

Original text written by Ms Jennifer Black and Dr Helen S Young, 2008.

Fully reviewed and revised by Dr Helen S Young, senior lecturer and honorary consultant in dermatology, The University of Manchester, Manchester Academic Health Science Centre, Department of Dermatology, Salford Royal Hospital (Hope), Stott Lane, Salford, M6 8HD in July 2013 and August 2015

A lay and peer review panel has provided key feedback on this leaflet. The panel includes people with or affected by psoriasis and/or psoriatic arthritis.

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The Information Standard scheme was developed by the Department of Health to help the public identify trustworthy health and social care information easily. At the heart of the scheme is the standard itself – a set of criteria that defines good quality health or social care information and the methods needed to produce it. To achieve the standard, organisations have to show that their processes and systems produce information that is:

- accurate
- impartial
- balanced
- evidence-based
- accessible
- well-written.

The assessment of information producers is provided by independent certification bodies accredited by The United Kingdom Accreditation Service (UKAS). Organisations that meet The Standard can place the quality mark on their information materials and their website - a reliable symbol of quality and assurance.
The charity for people with psoriasis and psoriatic arthritis

PAPAA, the single identity of the Psoriatic Arthritis Alliance and the Psoriasis Support Trust.

The organisation is independently funded and is a principal source of information and educational material for people with psoriasis and psoriatic arthritis in the UK.

PAPAA supports both patients and professionals by providing material that can be trusted (evidence-based), which has been approved and contains no bias or agendas.

PAPAA provides positive advice that enables people to be involved, as they move through their healthcare journey, in an informed way which is appropriate for their needs and any changing circumstances.

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