

Patient information

Raynaud's Scleroderma and Associated Vasomotor Disorder

Vascular Department

What is Raynaud's Phenomenon?

Raynaud's is caused by excessive arterial spasm in the skin – fingers and toes are commonly affected but occasionally the ears and nose.

Commonly the affected part becomes white as the circulation temporarily stops, then blue and bright red as the circulation returns to normal. The red phase may be painful. The clinical syndrome is known as Raynaud's phenomenon.

Not every patient will experience all of the colour changes and there is a range of severity from very mild, infrequent episodes for most patients to very severe disability for a few. The trigger for these events is a change in temperature such as going out in cold weather or using a fridge/freezer.

The majority of those affected are young. Most of those affected have a mild form of the condition and will improve without treatment as they get older. The onset of Raynaud's in middle age is more likely to have a secondary cause such as arterial disease, smoking, vasculitis (inflammation of the small or large blood vessels) such as rheumatoid arthritis and scleroderma or a blood disorder.

A cause cannot be identified in many cases.

What treatment is available for Raynaud's?

The majority of affected patients need simple advice. You should avoid cold situations and wrap up warm when you go outside in very cold weather. It is as important to keep your head warm as your hands and feet – therefore wear a hat and two pairs of gloves if necessary. Hand warmers are available to grip inside a glove and battery powered heated gloves are available for the worst affected.

Medication involving drugs that expand the circulation (vasodilators e.g. Nifedipine) and beta-blockers have some benefit but at the expense of side effects such as swelling and flushing. Surgery such as sympathectomy does not give long lasting results.



How can I help myself?

Keeping moving with exercise is helpful. Keep warm and stop smoking if this is an issue.

What investigations are needed?

The majority of patients do not need any tests – just advice.

Patients at risk of a secondary cause will have checks on their circulation and blood tests to look for vasculitis (inflammation of the small blood vessels or any blood disorder).

Patients with an identified secondary cause may need referral to another specialist.

❖ Connective Tissue Disorders

The group of diseases in which the body attacks its own connective tissue with antibodies is called connective tissue disorders. Connective tissue holds the cells together within and around our organs and therefore any part of the body can be affected.

Commonly the antibodies cause vasculitis (inflammation of the small blood vessels) of joints (causing arthritis), skin (causing skin rashes), nerves (causing numbness) but any organ can be affected.

❖ Scleroderma

Scleroderma is a severe type of connective tissue disorder with vasculitis involving antibodies against your own DNA. In its most severe form the internal organs such as the heart, lungs, kidney and bowel are affected as well as the skin.

In addition to Raynaud's phenomenon some patients have damage to the fingertips with ulcers and dry gangrene. The skin can develop painful deposits of calcium (calcinosis), the skin of the mouth can become tight and there may be difficulty with swallowing.

❖ Systemic Lupus Erythematosus (SLE)

SLE is another vasculitis that can cause Raynaud's but is a more generalised connective tissue disorder affecting the skin, internal organs such as heart, lungs and kidneys and joints (arthritis). Specialist care from a Rheumatologist will be necessary.

❖ Rheumatoid Arthritis

Rheumatoid disease is commonly associated with arthritis but it is also a vasculitis causing problems to internal organs, skin rash and ulcers. 10% of sufferers have Raynaud's.

What treatment is available?

Scleroderma, SLE and patients with severe rheumatoid disease need specialist referral to a Rheumatologist. Vasodilator medication to expand the small blood vessels can be used by mouth or intravenously in hospital.

You should avoid any injury to the fingers and protect them from harm. Fingertip amputation is necessary in only a few cases.



Surgical sympathectomy (dividing the nerve supply to the circulation) may give temporary relief but is not a long lasting treatment.

Associated conditions

❖ Chilblains

Chilblains or pernio is a common condition in the cold temperate climate of the UK, especially in the cold winter months.

It is caused by excessive spasm of the small arteries of the extremities (toes, fingers, ears and nose) as a result of exposure to cold. It can be burning, painful, itchy and irritating. Keeping warm and keeping the extremities warm will be the usual advice.

❖ Vibration white finger

Some patients who have used power tools in specific industries such as shipbuilding, forestry and steel finishing develop Raynaud's phenomenon with an element of nerve damage and pain in the fingers. There is often a long delay of many years before the symptoms become apparent. Vibration white finger is an industrial disease and may be eligible for compensation.

❖ Erythromelalgia

This is an uncommon condition of excessive redness, warmth and pain of the feet and legs (rarely hands and arms), commonly worse at night. Aspirin is thought to help. Severe nerve pain may require stronger painkillers such as gabapentin or pregabalin.

❖ Vasomotor dystrophy

There is a family of conditions in which the small blood vessels go into spasm and slow down normal blood flow. This can be a problem with patients who have paralysis, immobility or who are wheelchair or bed bound as a result of spinal injury, spina bifida, multiple sclerosis, stroke or any other condition that renders the patient immobile.

Morbid obesity can be a factor causing reduced mobility. The condition is due to an abnormal reflex between the muscle and joint receptors and the nerves (sympathetic nervous system) that control the circulation. The condition is sometimes called disuse sympathetic dystrophy.

Affected patients have cold feet with purple shiny skin. Elevating the legs helps. Fortunately it is not a serious problem for the majority of patients and no treatment is required other than advice.

❖ Chemical or drug induced vascular spasm

Spasm is excessive constriction of the blood vessels that slows or stops the circulation.

Some industrial chemicals such as vinyl chloride powder can induce Raynaud's but are located only in the chemical industry.



Prescription medications that can aggravate Raynaud's include beta-blockers, migraine tablets, ergot and the oral contraceptive.

Drug abuse and inadvertent arterial injection of recreational drugs can lead to gangrene and amputation.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further information

LiVES Contact Numbers

During your contact with us, it is important that you are happy with your care and treatment. Please speak to a member of staff and/or the ward/department Sister/Charge Nurse if you have any questions or concerns.

Vascular Ward

Ward 3

Aintree University Hospital

Tel: 0151 529 2028/2262

Vascular Nurses:

Aintree via switchboard

Tel: 0151 525 5980 Bleep 5609/5594 or extensions 4691/4692

Royal Liverpool Hospital via switchboard

Tel: 0151 706 2000 Bleep 4212 or extension 4675

Text phone number: 18001 0151 706 2000 Bleep 4212

Southport via switchboard

Tel: 01704 705124

Whiston Hospital

0151 290 4508/ 430 4199



Secretaries:

Aintree University Hospital

**Tel: 0151 706 3691/ 3523/3524/3481/3457/11813
0151 529 4950/4953**

Southport/Ormskirk Tel: 01704 704665

Whiston Hospital

St. Helens and Knowsley NHS Trust

Tel: 0151 430 1499

NHS 111

Tel: 111

Circulation Foundation:

www.circulationfoundation.org.uk/vascularisease/

Smoking cessation:

Liverpool

Tel: 0800 061 4212/ 0151 374 2535

Sefton

Tel: 0300 100 1000

West Lancashire

Tel: 0800 328 6297

Liverpool Vascular and Endovascular Service

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Participating Hospitals in LiVES are:

- **Liverpool University Hospitals NHS Foundation Trust**
- **Southport District General Hospital**
- **Ormskirk District General Hospital**
- **Whiston and St Helens Hospitals**

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