Hughes syndrome is thickening of the circulating blood caused by an abnormal immune system. The immune system produces abnormal blood proteins called antiphospholipid antibodies, which cause blood platelets to clump together.

Hughes syndrome is sometimes called ‘sticky blood syndrome’ because people with this condition are more likely to form clots in blood vessels (thromboses). People with certain autoimmune diseases such as systemic lupus erythematosus (SLE) are at increased risk of having Hughes syndrome.

Without medical treatment, blood clots may lodge in veins or arteries and cause dangerous complications. Any organ or limb can be affected, depending on the site of the blood clot.

Hughes syndrome is one of the more common autoimmune conditions, yet it is not as well known as some other diseases of the immune system. It is a lifelong condition and the causes are unclear.

There is no cure, but medical treatment can ease symptoms and reduce the risk of complications.

Antiphospholipid antibodies explained

The antiphospholipid antibody is an abnormal type of blood protein that is usually found only in people who have certain diseases such as Hughes syndrome or systemic lupus erythematosus. While most people with Hughes syndrome don’t have lupus, about one in every two people with lupus has Hughes syndrome. The reason for this overlap is unclear.

Antiphospholipid antibodies bind to molecules in the blood called phospholipids (a phospholipid is a fat or ‘lipid’ bound with phosphorus). This autoimmune reaction results in platelets sticking together. Clumping of platelets causes the build-up of clots. It is not clear what triggers the production of antiphospholipid antibodies.

It is thought that about two in every 100 healthy people have mild but detectable levels of antiphospholipid antibodies following illnesses such as hepatitis or malaria. Some drugs such as cocaine, quinine and antibiotics can also cause the blood to make antiphospholipid antibodies. In most of these cases, the temporary production of this abnormal blood protein doesn’t cause any harm.

Symptoms of Hughes syndrome

Without treatment, Hughes syndrome can cause many symptoms and complications, including:

- Migraine headaches
- Mottled skin tone (livedo reticularis)
- Low blood platelet count (thrombocytopenia)
- Vein thrombosis
- Deep vein thrombosis (DVT)
- Arterial thrombosis
- Heart attack
- Stroke
- Catastrophic antiphospholipid syndrome.

Complications of pregnancy

Hughes syndrome has been identified as a major cause of recurrent miscarriage. During pregnancy, the placenta provides the growing baby with oxygen and nutrients from the mother’s bloodstream. The blood of a woman with Hughes syndrome may be too sticky to pass through the tiny blood vessels of the placenta.

Complications can include:

- Miscarriage
- Fetal death

Tags:
- Immune system
- Immune system - Autoimmune disorders
- Blood and blood vessels
- Blood and blood vessels - Iron, anaemia and blood disorders

Also called

- Antiphospholipid syndrome
Catastrophic antiphospholipid syndrome

This is a rare but extremely life-threatening complication of Hughes syndrome. Typically, a healthy patient with Hughes syndrome suddenly develops multiple clots in various vital organs, including the brain, heart, lungs or liver. The reason for this is unclear. However, studies show that a percentage of patients have had a recent viral or bacterial infection, which leads some medical researchers to believe that infection may be a trigger.

Primary and secondary Hughes syndrome

The two types of Hughes syndrome include:

- **Primary** – the disease occurs on its own, not in association with an autoimmune condition such as systemic lupus erythematosus. Most people with Hughes syndrome have the primary type.
- **Secondary** – the disease occurs in association with a health problem somewhere else in the body, such as systemic lupus erythematosus.

Diagnosis of Hughes syndrome

Tests used in the diagnosis of Hughes syndrome include:

- Medical history
- Physical examination
- Blood tests.

Treatment for Hughes syndrome

There is no cure for Hughes syndrome. Treatment aims to ease symptoms and reduce the risk of complications. Options include:

- Medications to stop platelets from clumping together, such as low-dose aspirin
- Medications to thin the blood, such as heparin
- Cortisone drugs to control the inflammation associated with autoimmune diseases such as lupus
- Drug therapy to control other health problems, such as hypertension (high blood pressure) or diabetes, that may increase the risk of complications including stroke or heart attack
- Regular medical check-ups to monitor the medications and reduce the risk of side effects: for example, blood thinners may cause uncontrolled bleeding in some cases
- Lifestyle changes such as quitting cigarettes, eating a healthy diet and exercising regularly.

Ongoing medical treatment allows most people with Hughes syndrome to live long and healthy lives. However, you may need to take medications for long periods of time, perhaps for the rest of your life. Some people are troubled by complications, despite the best of care.

Where to get help

- Your doctor, who can refer you to a specialist such as a haematologist, obstetrician or rheumatologist
- In an emergency, always call triple zero (000)
- Musculoskeletal Australia National Help Line Tel. (03) 8531 8900 or 1800 263 265
- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)

References

- Overview of Hughes syndrome, Hughes Syndrome Foundation UK. More information here.

Send us your feedback

- Rate this website
- Your comments
- Questions
- Your details

1/4 How would you rate this website?

- Excellent
- Good
- Average
- Fair
- Poor

Next Submit Now Cancel

Send us your feedback

betterhealth.vic.gov.au
Please note that we cannot answer personal medical queries.
If you are looking for health or medical advice we recommend that you:

- talk to your doctor or pharmacist
- dial triple zero (000) in an emergency
- ring NURSE-ON-CALL Tel. 1300 60 60 24.

2/4 Your Comments

Tell us who you are and Enter your comments below (optional).

Send us your feedback

- Rate this website
- Your comments
- Questions
- Your details

3/4 Questions

What are you here to do? Looking for information on

Did you find what you were looking for?

- Yes
- No

Send us your feedback

- Rate this website
- Your comments
- Questions
- Your details

4/4 Your details

Postcode

Email Address

Send us your feedback

Thank you. Your feedback has been successfully sent.

More information

Immune system

The following content is displayed as Tabs. Once you have activated a link navigate to the end of the list to view its associated content. The activated link is defined as Active Tab:

- Immune system explained
- Lymphatic system
- Spleen
- Lupus
- Autoimmune disorders

Immune system explained

The immune system remembers every germ it has ever overcome...
• **Vaccines**
  Vaccines trick the body into building immunity against infectious diseases without causing the actual disease.

**Lymphatic system**

• **Fluid retention (oedema)**
  Fluid retention (oedema) occurs when fluid isn't removed from the body tissues, including the skin. Causes include the body's reaction to hot weather, a high salt intake, and the hormones associated.

• **Lymphoedema**
  Women who have undergone treatment of breast cancer are particularly susceptible to lymphoedema of the arm.

• **Lymphoma**
  Lymphoma is a general term for a cancer that begins in the lymphatic system.

**Spleen**

• **Spleen**
  Surgically removing a diseased or damaged spleen is possible without causing any serious harm to the person.

• **Splenomegaly**
  Any conditions that cause a rapid breakdown of blood cells can place great strain on the spleen and make it enlarge.

**Lupus**

• **Lupus**
  Lupus can be mild or life-threatening, depending on which tissues are affected.

• **Lupus and infections**
  The most common infections for people with lupus include those of the respiratory tract, skin and urinary system.

• **Lupus and medication**
  Lupus most commonly appears in women of childbearing age.

• **Lupus and pregnancy**
  Lupus can be controlled with medications, so the majority of affected women are able to have children.

**Autoimmune disorders**

• **Addison's disease**
  Most cases of Addison's disease are caused by an autoimmune response that attacks and damages the adrenal glands over time.

• **Autoimmune disorders**
  There is generally no cure for an autoimmune disorder, but the symptoms can be managed.

• **Chronic fatigue syndrome (CFS)**
  Myalgic encephalomyelitis, commonly known as chronic fatigue syndrome, can affect people of any age, including children.

• **Diabetes type 1**
  Type 1 diabetes can affect anyone of any age, but is more common in people under 30 years.

• **Guillain-Barré syndrome**
  Most people with Guillain-Barré syndrome experienced some form of viral or bacterial infection before the onset of symptoms.

• **Henoch-Schonlein purpura**
  Henoch-Schonlein purpura causes a purple spotted skin rash which lasts around one to four weeks, and is often marked by relapses.

• **HIV**
  In Australia, HIV is most commonly spread when having sex without a condom and when sharing needles and other injecting equipment.

• **Hughes syndrome**
  Hughes syndrome is thickening of the blood caused by abnormal immune system cells.

betterhealth.vic.gov.au
• **Idiopathic thrombocytopenic purpura (ITP)**
  
  Idiopathic thrombocytopenic purpura (ITP) is a rare autoimmune disorder in which a person’s immune system destroys the platelets that help their blood to clot.

• **Lipoedema**
  
  Lipoedema is a painful, chronic, symmetrical swelling in the legs, thighs, buttocks and sometimes arms due to the accumulation of fat in the subcutaneous tissues. The onset often occurs during puberty.

• **Myasthenia gravis**
  
  Myasthenia gravis is an autoimmune disease that causes muscle weakness.

• **Polymyositis**
  
  Polymyositis is hard to diagnose and may be mistaken for muscular dystrophy.

• **Raynaud’s phenomenon**
  
  Raynaud’s phenomenon can be a sign of a more serious underlying condition, so see your doctor if you experience it.

• **Reactive arthritis**
  
  Reactive arthritis is a form of arthritis that occurs as a result of some bacterial infections.

• **Retroperitoneal fibrosis**
  
  Retroperitoneal fibrosis is the abnormal growth of tissue on and around abdominal structures, including blood vessels and ureters.

• **Rheumatoid arthritis**
  
  Early treatment of rheumatoid arthritis is important in helping you manage the condition more effectively.

• **Scleroderma**
  
  The most common symptom of scleroderma is a thickening and hardening of the skin, particularly of the hands and face.

• **Sjogren’s syndrome**
  
  Sjogren’s syndrome can be managed with medications and products such as artificial tears and saliva.

• **Thyroid - Hashimoto’s disease**
  
  Hashimoto’s disease progresses very slowly over many years, so the symptoms may go unnoticed.

• **Thyroid - hyperthyroidism**
  
  Hyperthyroidism can be diagnosed with a simple blood test that measures thyroid hormone levels.

**Related Information**

• **Blood and blood vessels**
  
  Bleeding, blood pressure, conditions, risks and blood products.

• **Raynaud's phenomenon**
  
  Raynaud’s phenomenon can be a sign of a more serious underlying condition, so see your doctor if you experience it.

• **Anaemia**
  
  When a person is anaemic, the red blood cells have to work harder to get oxygen around the body.

• **Sjogren’s syndrome**
  
  Sjogren’s syndrome can be managed with medications and products such as artificial tears and saliva.

• **Retroperitoneal fibrosis**
  
  Retroperitoneal fibrosis is the abnormal growth of tissue on and around abdominal structures, including blood vessels and ureters.

**Home**

**Related information on other websites**

• [Hughes Syndrome Foundation](#)

**Content Partner**

This page has been produced in consultation with and approved by: Better Health Channel - (need new cp)
My Health Life helps you manage your health

With tools, information and recommendations tailored to you, it’s your personal and secure health dashboard.

Learn more

Medical Dictionary

Enter a search term

Search

Search for your topic using the Merriam Webster medical dictionary

Service Search

Find services near you

Service: Select a service

Location:

Type a minimum of three characters then press UP or DOWN on the keyboard to navigate the autocompleted search results
Find a doctor

Need to find a doctor in your local area? Take a look at the general practitioners entry in our health service profiles.

see general practitioner

Recent Activity

Polls polled today are 1. 35 people have watched a video today

- **Health topics**
  - Conditions and treatments
  - Healthy living
  - Services and support

- **Explore**
  - Recipes
  - Healthy pantry
  - Videos
  - Consumer medicine information
  - Multilingual health information - Health Translations Directory

- **About**
  - About us
  - Accessibility
  - Content partners
  - Privacy
  - Terms of use
  - Contact us

- **Connect with us**
  - Facebook
  - Twitter
  - YouTube

Page last reviewed: 30 Sep 2012


  - Privacy Statement
  - Copyright Notice
  - Disclaimer Notice