

Arthritis

What is arthritis?

Arthritis means joint (arth-) inflammation (-itis)¹. Arthritis is a group of joint inflammation conditions which cause pain and limited mobility. There are several causes of arthritis, and it takes many forms.

Many people think arthritis affects only older people. In fact, it can affect people of all ages.

Haemophilia and arthritis

Regular bleeding into the same spot (target joints) can cause arthritis. Blood in the joint gradually erodes the cartilage that protects bone ends, causing wear and tear. This type of arthritis is called 'osteoarthritis'². Symptoms include morning stiffness or pain which may feel different from pains associated with bleeds.

Will my child develop arthritis?

Arthritis is a common condition amongst the general population and he or she may eventually develop arthritis even if there are no bleeds into joints at all.

Treatment and haemophilia care today are at a level where arthritis is less of an issue than it once was. However, it can still occur. There are several things you can do to help reduce the chances of your child developing arthritis.

What can I do to reduce the chance of my child developing arthritis?

- Prompt treatment. Whether or not your child is on prophylactic treatment, ensuring that bleeds are treated promptly will greatly reduce the chance of arthritis developing.

- Maintaining a healthy weight reduces the strain placed on joints and muscles.
- Regular exercise not only helps prevent bleeds, but also helps keep muscles strong and joints supple enough to handle the demands of life. Furthermore, regular exercise helps maintain a healthy weight.
- Prophylactic treatment helps prevent arthritis by significantly reducing the number of bleeds experienced. Children who do not have regular bleeds may not require prophylaxis.
- **Physiotherapy, treatment and support after a bleed** to help total resolution of the bleed and its effects.

What treatment is available for arthritis?

Most arthritic conditions can be treated but not cured. However, treatment is improving all the time. New medication and operations are safer and more effective, and there is also greater awareness of options available for people with arthritis.

- Exercise is of great benefit to people with arthritis. Regular exercise strengthens muscles and keeps joints supple. Improved strength in muscles surrounding affected joints helps reduce pain. Swimming is an excellent exercise for people with arthritis and haemophilia.
- Drugs are also available to treat arthritis. If your child requires medication for arthritis, discuss options with your haemophilia clinician to ensure the proposed medication is appropriate.

Do NOT give your child aspirin or products containing aspirin as this encourages bleeding.

- Diet is also important. While there is no particular diet or 'magical food' for arthritis, a healthy balanced diet will help prevent excess weight. By maintaining a healthy weight, your child will reduce the strain placed on muscles and joints. If you need further advice, ask to see a dietitian.

Inhibitors

What is an inhibitor?

Inhibitors (or antibodies) are body proteins that normally fight off disease. Some people with haemophilia develop an inhibitor (or resistance) to factor VIII or factor IX. This means that as soon as it is injected into their bloodstream, it is inactivated and the treatment does not work. Therefore, special factor concentrates need to be given to these people.

How common are inhibitors?

Reported rates of inhibitor development vary. Inhibitors develop in approximately 15-30% of individuals with haemophilia A and in 2-5% of those with haemophilia B.

Inhibitors are more common amongst individuals with a severe form of haemophilia.

They usually first appear after the child has had only a few treatments with factor. The presence of an inhibitor is suspected when bleeds no longer respond to the usual treatment. Alternative treatments are available for patients who develop an inhibitor.

Is there treatment available for inhibitors?

Yes. There are special treatment products available for people with inhibitors, and some people with inhibitors can be 'tolerised'.

Your Haemophilia Centre staff will outline treatment options should this be relevant to your child.

Blood borne viruses

What is a blood borne virus?

A blood borne virus is a virus that lives in the blood. It is transmitted from blood to blood contact.

Two commonly talked about blood borne viruses are hepatitis C and HIV.

What is hepatitis C?

You may have heard of hepatitis, which is inflammation of the liver.

Hepatitis C is passed on through blood to blood contact. There is no vaccination against hepatitis C.

What is HIV?

HIV (Human Immunodeficiency Virus) is the virus that can eventually cause AIDS (Acquired Immune Deficiency Syndrome). It is transmitted in body fluids including blood.

How do people with haemophilia get hepatitis C or HIV?

Before testing became available, some people with haemophilia were infected with HIV and/or hepatitis C because they used blood products made from blood that was infected.

Will my child get hepatitis C or HIV?

Since blood tests to identify HIV or hepatitis C became available in Australia, no-one has contracted hepatitis C or HIV from haemophilia treatment products produced from human plasma. Recombinant products are considered even safer because they are made from little or no human or animal material.

Are there other viruses my child could get?

While it is possible there could be other viruses for which tests are not yet available, measures are being taken to prevent such infections. Government regulations monitor blood collection and how all therapeutic products are made. Treatment product manufacturers are required to meet rigorous standards for viral testing and inactivation techniques during manufacture.

How safe is the treatment product?

Most plasma derived factor products used in Australia are made from blood collected by the Australian Red Cross Blood Service from donors who meet specific criteria. These blood donations are rigorously tested for blood borne viruses including hepatitis and HIV. All blood used to make haemophilia treatment products is specially treated to inactivate or eliminate any viruses in the manufacturing process.

Recombinant clotting factor products are imported to Australia. They are manufactured in laboratories with little or no human or animal material. These are the 'gold standard' treatment products for most people with haemophilia. It is important to note that some people require plasma derived products for clinical reasons.

Recombinant products

Recombinant products are genetically engineered or synthetic clotting factors made to rigorous standards in laboratories. Because they are made with little or no human or animal material they are considered to carry less risk of blood borne virus or agents that might come through blood products.

Most children will be prescribed recombinant concentrates in Australia.

If you have questions about the treatment your child is receiving, speak to your treating health care professional or local Haemophilia Centre. Haemophilia Foundations do not practice medicine nor recommend treatments for particular individuals.

variant CJD

What is variant CJD?

variant Creutzfeldt Jacob disease (known as vCJD) is of concern to the bleeding disorders community because it is believed the agent which causes bovine spongiform encephalopathy in cows (known as BSE or “mad cow disease”), may also be transmitted through blood to humans by people who have consumed BSE infected cows, who might unknowingly transmit this in donated blood to others. There is no known treatment of vCJD and it is invariably fatal. Whilst there have been no cases worldwide where plasma derived haemophilia products have been implicated in this way, there have now been cases where the transmission of vCJD has almost certainly occurred through treatment with fresh blood products that were donated by people later found to have vCJD.

In response to this theoretical risk that transmission of vCJD could occur in this way, people who have lived in BSE affected countries for specified periods of time are not allowed to donate blood in Australia, and plasma derived clotting factor products made in Australia are made from donations of plasma from people who have not travelled outside Australia or New Zealand.

Should I worry about blood borne viruses and agents like vCJD?

It is unlikely that your child will contract a blood borne virus or agent from haemophilia treatment products. Information about blood borne viruses has been included here because you may hear about others who acquired hepatitis C or HIV prior to testing and inactivation processes being available and you may have heard about the risk of vCJD.

New blood borne viruses may emerge for which there are no tests or viral inactivation procedures. Government regulators monitor these and ensure rigorous testing and quality assurance. To minimise the risk of infection, viral screening and viral inactivation is standard for all treatment products.