ANDROLOGY AUSTRALIA

c/o Monash Institute of Medical Research Monash Medical Centre 246 Clayton Road, Clayton, Vic 3168 Tel: 1300 303 878 Fax: 61 3 9594 7111 Email: info@andrologyaustralia.org

Blood in Semen

Is it normal for blood to be in semen?

Blood in semen is not uncommon and can appear as either a brownish or red colour in the semen. For most men it is painless, being noticed incidentally after ejaculation. At other times it can be present in the ejaculate but may not be seen by the naked eye, evident only using a microscope.

Blood in semen, also called haematospermia, can affect men of any age after puberty, but most often happens between 30 and 40 years of age and in men over 50 years of age with benign prostate enlargement. The majority of cases go away in time without treatment. Up to 90 per cent of men who have had blood in their semen experience repeated episodes.

Should I worry about finding blood in semen?

While the appearance of blood in the semen can be alarming for many men, it is generally not a sign of a serious problem. However, it is important to get medical advice if blood is noticed.

What should I do if I find blood in semen?

If you have blood in your semen, make an appointment to see your local doctor and think about the following questions:

- How much blood is in the semen is the ejaculate a very red colour or are there just flecks?
- Was blood ever noticed in the past when the semen was examined for another reason?
- When was blood first noticed? Is blood present all the time?
- How many times have you noticed blood in the semen?
- Is there anything that seems to have caused this symptom?
- What, if any, other symptoms do you have?

How does a doctor confirm that it is blood that is in the semen?

To confirm that there is blood in the semen, a doctor will first do a physical check-up, including a genital and rectal examination, and a blood pressure test. A semen sample may be needed to check the amount of blood in the ejaculate.

The doctor will also examine a urine sample to make sure no blood is present, either visually or under the microscope, and will check for signs of a urinary tract infection.

Why can blood appear in semen?

The male reproductive system is made up of a number of organs and glands. Sperm are produced in the testes, and as they travel through the male reproductive system, fluid is added to protect and nurture the sperm. Sperm collects fluid from the seminal vesicles and travels through the ejaculatory ducts and prostate gland before being expelled out of the penis through the urethra and bleeding can happen at any of these sites.

Diagram of the male reproductive system

fact sheet

Page 1 of 2

Blood in semen may be caused by inflammation, infection, blockage, or injury anywhere along the male reproductive system. The seminal vesicles – a pair of pouch-like glands situated on either side of the bladder – and the prostate are the main organs that contribute the fluid to the sperm, so an infection, inflammation or trauma in these organs will cause blood in the semen.

When can blood be found in the semen?

Blood can be found in semen as an isolated symptom (primary haematospermia) or when it happens in association with other symptoms (secondary haematospermia).

Primary haematospermia is when blood in the semen is the only symptom. No blood is found in the urine, and a physical examination does not find any other problems. In men who have blood in semen and no other symptoms, often no cause for the appearance of blood can be found.



Blood in Semen

Secondary haematospermia is when there is a suspected or known cause for the bleeding, such as after a prostate biopsy procedure or a urinary or prostate infection or, rarely, if cancer is present. Blood in semen can also happen in men over 50 years of age with benign prostate enlargement with calcifications (deposits of calcium) that can be seen on ultrasound. In very rare cases, other causes of secondary haematospermia can include tuberculosis, parasitic infections, and any diseases that affect blood clotting such as haemophilia and chronic liver disease.

An ultrasound-guided biopsy of the prostate can cause blood in semen in about one third of men who undergo this procedure.

Cancer of the testes or prostate are very rarely associated with blood in semen.

If blood appears in semen as secondary haematospermia, other symptoms can be present including:

- Pain with urination
- Pain with ejaculation
- Pain with bowel movement
- Tenderness in the scrotum
- Swelling in the scrotum
- Swelling or tenderness in the groin area
- Lower back pain
- Fever or chills
- Blood in the urine.

Can blood in semen be caused by sexually transmitted infections?

Blood in semen is most unlikely to be caused by any sexually transmitted infections (STIs). Some STIs can be transmitted through blood and semen, but they are not regarded as a cause for blood to appear in semen.

Can blood in semen be caused by injuries or rough sex?

Injuries can cause blood to appear in semen. A major injury as a result of a car accident or rough collision can cause damage to the reproductive system that may lead to blood appearing in the semen.

Rough sex is a possible cause of blood in semen. There is no reason to be alarmed, but it is recommended that you see a doctor and watch for any sign of blood in the urine.

If other causes of blood in semen are suspected, what tests are done to confirm the cause?

If blood is found in the urine (visual or microscopic), or if blood in semen is linked with symptoms of a urinary tract infection, then a Urologist must be seen and further tests done.

If blood is found in the urine, an x-ray or ultrasound of the urinary tract is needed, as well as a telescopic examination of the bladder and prostate.

A rectal examination is also needed to test the prostate and seminal vesicles. If the rectal examination identifies areas of concern or if the telescopic examination of the prostate is abnormal, an ultrasound examination and biopsy may be necessary.

How is blood in semen treated?

Men with primary haematospermia generally do not need treatment when blood in the semen is the only symptom and when physical examination and urine analysis are normal. Blood in semen can continue on and off, but it generally clears up without treatment and carries no increased risk of other diseases; nor will the man be putting his sexual partner at risk.

How is blood in semen treated when there are other symptoms present?

Treatment will vary for men with secondary haematospermia, depending on the other symptoms and underlying cause. Some examples of treatment for specific causes include:

- Minor injuries treated with rest and monitoring symptoms
- Major injuries may need open surgery
- Infections can often be treated with antibiotics
- Blockages are typically treated with minor surgery
- In the rare event of cancerous tumours - radiation or chemotherapy may be needed.

In particular, men over the age of 40 who continue to have blood in semen, especially when accompanied by other symptoms, should seek help from a Urologist.



The information in this fact sheet on blood in semen has been produced in partnership with The Urological Society of Australia and New Zealand.

About the Author

Associate Professor RA "Frank" Gardiner

University of Queensland Date: August 2007 © Andrology Australia 2007 Andrology Australia is an initiative funded by the Australian Government Department of Health and Ageing. The information in this fact sheet has been provided for educational purposes only. It is not intended to take the place of a clinical diagnosis or proper medical advice from a fully qualified health professional. Andrology Australia urges readers to seek the services of a qualified medical practitioner for any personal health concerns.

fact sheet Page 2 of 2