#### How do I determine the cause of haematospermia?

Ask about:

• **Age.** Men older than 40 years of age with haematospermia are at increased risk of a serious cause for haematospermia, such as prostate cancer or prostatitis.

• **The number of episodes of haematospermia he has had.** Prolonged recurrent episodes are thought to increase the risk of a serious underlying cause for haematospermia.

# • Recent instrumentation or trauma to the genitalia.

• Known bleeding disorders, such as haemophilia or von Willebrand's disease.

# • Symptoms of urological infection or cancer.

Dysuria, urgency, or frequency, with or without haematuria, may indicate a urinary tract infection. For further information, see the CKS topics on <u>Urinary tract infection</u> (lower) - men and <u>Urinary tract infection - children</u>.

• Perineal or suprapubic pain associated with symptoms of a urinary tract infection may indicate acute or chronic prostatitis. For further information, see the CKS topics on <u>Prostatitis - acute</u> and <u>Prostatitis - chronic</u>.

• Painless haematuria may indicate an underlying urological cancer. For further information, see the CKS topic on <u>Urological cancer - suspected</u>.

• **Risk factors for, and symptoms of, sexually transmitted infection.** Dysuria associated with urethral discharge may indicate a sexually transmitted infection. For further information, see the CKS topics on <u>Urethritis - male</u>, <u>Gonorrhoea</u>, <u>Trichomoniasis</u>, and <u>Herpes simplex - genital</u>.

• **Symptoms of benign prostatic hypertrophy or prostate cancer.** These include hesitancy, frequency, or dribbling. For further information, see the CKS topic on <u>LUTS in men, age-related (prostatism)</u>.

• **Symptoms of disorders causing an acquired bleeding disorder.** These include liver failure, kidney failure, and haematological cancers.

Examine:

• **Blood pressure** for uncontrolled hypertension.

• For signs of anaemia and bruising associated with an acquired bleeding disorder.

• **The penis** and the urethral meatus for signs of genital warts, or unreported injury.

• **The testes** for signs of cancer. For further information, see the CKS topic on <u>Scrotal</u> <u>swellings</u>.

• **The prostate** for signs of benign prostatic hyperplasia or cancer.

• **The abdomen** for abnormalities of the kidneys, liver, or spleen that could indicate an acquired bleeding disorder.

- Send a mid-stream urine sample for analysis and culture in all men and boys.
- Consider other investigations guided by clinical findings:

• Investigations for a sexually transmitted infection (in men with symptoms or who are at risk).

- A full blood count, coagulation screen, and renal and liver function tests.
- Prostate specific antigen (PSA) level if prostate cancer is suspected.
- Scrotal ultrasound if there is testicular swelling.

### Basis for recommendation

Experts recommend assessing all people for serious conditions thought to cause haematospermia [Narouz and Wallace, 2002; Papp et al, 2003; Ahmad and Krishna, 2007; Magoha and Magoha, 2007; Aslam et al, 2009; Stefanovic et al, 2009]. Expert review articles on secondary care management commonly recommend arranging a wide range of blood tests and screening for sexually transmitted infections in all men. However, this was not supported by CKS expert reviewers for men presenting in primary care.

# Haematospermia - Management Scenario: Haematospermia

How should I manage a man with no identifiable cause for haematospermia?

- For men younger than 40 years of age who have had no more than three episodes of haematospermia within one month:
- Reassure that a serious cause is extremely unlikely.
- Advise the man or boy to return if more than three episodes of haematospermia occur or episodes of haematospermia continue for more than one month.
- For men of 40 years of age or older, those who have experienced more than three episodes of haematospermia, and those experiencing episodes of haematospermia for more than one month, refer to a urologist for further assessment.

#### **Basis for recommendation**

Referral criteria are based on expert opinion of the risk of a serious cause for haematospermia [<u>Ahmad and Krishna</u>, 2007; <u>Torigian and Ramchandani</u>, 2007; <u>Szlauer and Jungwirth</u>, 2008; <u>Leocadio and Stein</u>, 2009; <u>Stefanovic et al</u>, 2009].

• The association between persistent haematospermia and serious pathology is based on expert opinion. CKS identified no trials that looked for this association.

- Expert opinion is supported by limited <u>evidence</u> that there is probably an increased risk of prostate cancer in men of 40 years of age and older with haematospermia.
- There is further limited <u>evidence</u> that the risk of a serious cause for haematospermia is extremely low in men younger than 40 years of age.

How should I manage a man with an identifiable cause for haematospermia?

- If the haematospermia is secondary to:
- **A urinary tract infection** treat with antibiotics. For further information, see the CKS topic on <u>Urinary tract infection (lower) men</u> and <u>Urinary tract infection children</u>.
- **Suspected prostate cancer** refer the man or boy to a urologist. For further information, see the CKS topic on <u>Urological cancer suspected</u>.
- Suspected testicular cancer see the CKS topic on <u>Scrotal swellings</u>.
- **Suspected benign prostatic hypertrophy** see the CKS topic on <u>LUTS in men, age-related (prostatism)</u>.
- **Suspected prostatitis** see the CKS topics on <u>Prostatitis acute</u> and <u>Prostatitis chronic</u>.
- **Trauma or instrumentation** (such as prostatic biopsy) reassure him that symptoms normally settle within 3–4 weeks.
- Suspected sexually transmitted infection refer the man or boy to a service specializing in sexual health for further investigation and management. For further information, see the CKS topics on <u>Urethritis - male</u>, <u>Gonorrhoea</u>, <u>Trichomoniasis</u>, and <u>Herpes simplex - genital</u>.
- **An acquired bleeding disorder** (secondary to suspected haematological cancer, or liver or kidney failure) refer for further assessment to the appropriate specialist.

#### **Basis for recommendation**

# Haematospermia following instrumentation

- The recommendation to reassure men with haematospermia following prostatic biopsy is based on an observational study of the incidence and duration of haematospermia following transrectal ultrasoundguided prostate biopsy [Manoharan et al, 2007].
- Following transrectal ultrasound-guided prostate biopsy, 63 men were instructed to ejaculate at least once weekly and record any episodes of haematospermia.
- A total of 84% of men had at least one episode of haematospermia.
- The mean duration of symptoms was 3.5 weeks.

# Haematospermia secondary to causes other than instrumentation

 Management recommendations for other causes of haematospermia, and the basis for these recommendations, are located within the appropriate CKS topic.