

key points

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Varicocele is present in 15% of men. The term describes

a collection of enlarged veins in the scrotum. Most patients who seek a medical opinion are aged between 15 and 30 and asymptomatic. Varicoceles may be present in up to 40% of men who present with subfertility, but although there is an association between varicocele and impaired semen parameters most men will be able to achieve a natural conception without intervention.

The precise mechanism by which varicoceles develop

is poorly understood, however the clinical condition is acknowledged to result from venous reflux. The absence of valves in the testicular veins is more common on the left side thus approximately 90% of varicoceles are left sided. Increased renal vein or testicular vein pressure is another recognised cause of varicocele, this may result from the angle of venous drainage or multiple pathologies.

A thorough history and examination is essential to make

a clinical diagnosis and determine the probable cause. The history should include: the amount of time the swelling has been present for; an assessment of degree of bothersome symptoms; details of previous surgery and fertility. It is important to be alert to the patient with an acutely presenting varicocele or a solitary right-sided varicocele as this may be the first presentation of a retroperitoneal malignancy especially if the patient is over the age of 40 and the varicocele does not disappear on lying down. A full abdominal examination including the scrotum should be performed and the patient examined in supine and standing positions.

The majority of varicoceles occur in young healthy men

and clinical examination alone is enough to make the diagnosis. Referral to a urologist and further investigations in most of these cases are not required and the patient should be reassured. Supportive underwear may aid patients with small varicoceles complaining of a mild dragging sensation in the scrotum. Patients in whom an intra-abdominal malignancy is suspected or with significant pain should be referred to a urologist.

NICE guidance does not recommend the surgical

treatment of varicoceles for infertility. There is no evidence that treatment at a younger age will improve fertility compared with intervention later. A quarter of men who have a varicocele may have abnormal semen parameters. All patients with a varicocele presenting as part of a couple with fertility problems should be referred to a urologist with a specialist interest in fertility and an expert in assisted reproduction techniques and be counselled regarding the relative success rates of all options: varicocele surgery versus assisted reproduction.

The principles of therapy are to ligate or occlude the

internal spermatic veins while preserving arterial flow to the testis from the testicular artery. Surgical techniques or interventional radiology using embolisation or sclerotherapy form the mainstay of treatment.