

What is the safest and most effective treatment for varicoceles in men affected by subfertility?

Clinical Question	Are surgical and radiological treatment of varicoceles in men with subfertility safe and effective?
Bottom Line	<p>Any treatment (surgical or radiological) may be more effective in increasing pregnancy rates than delayed or no treatment. Any treatment (surgical or radiological) was found to be more effective in increasing pregnancy rates in participants with abnormal semen parameters and clinical varicocele.</p> <p>When comparing surgical with radiological treatment, the Cochrane authors could draw no valid conclusions that surgical treatment or radiological treatment was the superior method in improving the chance of live birth or pregnancy. The evidence on varicocele recurrence and adverse events (hydrocele formation, pain, epididymitis, haematoma, and suture granuloma) was also inconclusive. Evidence on quality of life was lacking for this comparison.</p> <p>When comparing surgical treatments with each other, microscopic subinguinal surgical treatment showed higher pregnancy rates and lower varicocele recurrence rates than other surgical treatments.</p>
Caveat	The clinical and statistical heterogeneity of the studies and the small numbers of participants should be taken into account, and the overall certainty of the evidence was rated mostly as low or very low for all outcomes
Context	Varicoceles are associated with male subfertility; however, the mechanisms by which varicoceles affect fertility have yet to be satisfactorily explained. Several treatment options exist, including surgical or radiological treatment, however the safest and most efficient treatment remains unclear.
Cochrane Systematic Review	Persad E, O'Loughlin CAA, Kaur S, Wagner G, Matyas N, Hassler-Di Fratta MR, Nussbaumer-Streit B. Surgical or radiological treatment for varicoceles in subfertile men. Cochrane Database of Systematic Reviews 2021, Issue 4. Art. No.: CD000479. DOI: 10.1002/14651858.CD000479.pub6. This review contains 48 trials with a total of 5,384 participants.

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Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD000479.pub6/full>