NICE National Institute for Health and Care Excellence

NICE guidance

Transurethral electrovaporisation of the prostate

HealthTech guidance
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www.nice.org.uk/guidance/htg4

Your responsibility

This guidance represents the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take this guidance fully into account, and specifically any special arrangements relating to the introduction of new interventional procedures. The guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

All problems (adverse events) related to a medicine or medical device used for treatment or in a procedure should be reported to the Medicines and Healthcare products Regulatory Agency using the Yellow Card Scheme.

Commissioners and/or providers have a responsibility to implement the guidance, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties. Providers should ensure that governance structures are in place to review, authorise and monitor the introduction of new devices and procedures.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Contents

This guidance replaces IPG14.

This guidance should be read in conjunction with CG97.

1 Recommendations

1.1 Current evidence on the safety and efficacy of transurethral electrovaporisation of the prostate appears adequate to support the use of the procedure, provided that normal arrangements are in place for consent, audit and clinical governance.

2 The procedure

2.1 Indications

2.1.1 Transurethral electrovaporisation of the prostate is used to treat benign prostatic obstruction (BPO). BPO is a non-malignant enlargement of the prostate and is a common cause of lower urinary tract symptoms (such as difficulty in passing urine) in men aged over 40 years. Transurethral electrovaporisation of the prostate is a minimally invasive alternative to the standard surgical treatment of BPO, transurethral resection of the prostate (TURP).

2.2 Outline of the procedure

2.2.1 Transurethral electrovaporisation of the prostate, an electroablative technique, is performed using a specially designed modified rollerball electrode. The electrode is rolled over the prostatic tissue to create an area of vaporisation and an underlying coagulative necrosis. Vaporisation continues until an appropriate cavity is created. An in-dwelling urethral catheter is left in place at the end of the procedure.

2.3 Efficacy

2.3.1 This procedure is a relatively well-established minimally invasive treatment for BPO. A number of randomised controlled trials of this procedure were available for review. Transurethral electrovaporisation of the prostate was shown to be as efficacious as TURP in the short term.

2.3.2 The Specialist Advisors noted that the long-term durability of the procedure has yet to be established, and that efficacy is probably limited to smaller prostates.

2.4 Safety

2.4.1 Complication rates of transurethral electrovaporisation of the prostate and TURP appeared to be similar, although some studies suggested that bleeding was less common with transurethral electrovaporisation of the prostate. One study reported that long-term irritative symptoms were more common with transurethral electrovaporisation of the prostate.

2.4.2 The Specialist Advisors did not report any particular safety concerns, although one Advisor stated that postoperative bleeding and metabolic disorders were potential complications.

3 Further information

Sources of evidence

The evidence considered by the committee is in the overview.

Information for patients

NICE has produced information for the public on this procedure. It explains the nature of the procedure and the guidance issued by NICE, and has been written with patient consent in mind.

Update information

Minor changes after publication

January 2026: Interventional procedures guidance 14 has been migrated to HealthTech guidance 4. The recommendations and accompanying content remain unchanged.

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Endorsing organisation

This guidance has been endorsed by Healthcare Improvement Scotland.