

“Ejaculation sparing” techniques in benign prostatic hyperplasia (BPH)



Understanding how they work,
when they can be useful,
and which limitations matter

Techniques designed to preserve ejaculation in benign prostatic hyperplasia (BPH)

Understanding how they work, when they can be useful, and which limitations matter

In recent years, several procedures have been proposed for the treatment of benign prostatic hyperplasia with the aim of **preserving ejaculation**. These options are often presented as “less invasive” solutions or as alternatives to standard de-obstructive surgery.

It is essential, however, to clarify one key point from the outset:

👉 **Preserving ejaculation, in most cases, means accepting a lower de-obstructive effect.**

These techniques do not remove the obstructing prostatic tissue completely. They **act more partially**, and their results can be appropriate only in **carefully selected situations**.

Before we start: what IPSS and Qmax mean

This document refers to two parameters commonly used to assess outcomes across techniques.

- **IPSS (International Prostate Symptom Score)**

A standardized questionnaire that measures the **severity of urinary symptoms** (weak stream, hesitancy, frequency, urgency, nocturia).

The score ranges from 0 to 35: the higher the score, the more severe the symptoms.

👉 A reduction in IPSS reflects an improvement **as perceived by the patient**.

- **Qmax**

The maximum **urinary flow rate** measured by uroflowmetry.

👉 Higher values indicate **less obstruction** and more effective bladder emptying.

These parameters help quantify **how much a technique truly relieves obstruction** and how durable the benefit is.

A fundamental principle

Effective prostate surgery is based on a simple concept:

👉 **The more obstructing tissue is removed, the more stable the result over time.**

Ejaculation-preserving techniques typically

- relieve obstruction to a lesser degree
- leave more prostatic tissue in place
- are associated with a **higher likelihood of symptom recurrence**, even in the short to medium term

A frequently underestimated factor is the **presence of a median lobe** (third lobe). For many of these procedures it is a contraindication, or a major limitation, because it contributes substantially to **bladder neck obstruction**.

How the main ejaculation-preserving techniques work

Rezūm

Uses injections of **water vapor** into prostatic tissue, producing progressive thermal necrosis.

Mechanism

- does not remove tissue
- reduces volume indirectly over time

 IPSS improvement: **45–55%**

 Qmax increase: **+5–7 ml/s**

 ejaculation preserved: **80–90%**

 retreatment: **up to 20–25% at 5 years**

👉 Limited efficacy, less predictable outcomes, **weak indication in the presence of a median lobe or larger volumes.**

TPLA (transperineal laser ablation of the prostate)

Involves insertion of laser fibers through the perineum under ultrasound guidance.

Mechanism

- destroys tissue in a non-selective manner
- does not allow true remodelling of the obstructing anatomy

 volume reduction: **20–40%**

 IPSS improvement: **40–50%**

 failure/retreatment: **15–25% within 2–3 years**

👉 Minimally invasive, but **not comparable to a true de-obstructive operation**; results are highly variable.

UroLift

A mechanical system that retracts the prostatic lobes using metallic implants.

Mechanism

- does not remove or ablate tissue
- temporarily changes the geometry of the prostatic urethra

-  IPSS improvement: **35–45%**
-  Qmax increase: **+3–4 ml/s**
-  retreatment: **20–30% at 5 years**

👉 Ineffective with a **median lobe**, with a higher probability of progression over time.

Aquablation

Uses a **high-pressure water jet** guided by imaging.

It is important to understand that the procedure has **two distinct phases**:

1 Robotic planning and ablation

- the target area is planned
- the water jet removes a defined amount of tissue

2 Hemostasis and refinement

- a **conventional resectoscope** is required
- the surgeon controls bleeding and refines the treatment

👉 In **medium-to-large prostates**, the second phase can be demanding, particularly for hemostasis.

-  IPSS improvement: **60–70%**
-  Qmax increase: **+10–15 ml/s**
-  retreatment: **5–10% at 3–5 years**

the best outcomes are reported when **a substantial amount of tissue is removed**.

👉 This challenges the idea of “automatic standardization”: efficacy still depends **on how much tissue is actually taken away**.

Ejaculation-preserving options with a clear surgical rationale

TUIP / ThuLIP

(bladder neck incision for small prostates)

Mechanism

- incises the bladder neck
- resolves functional obstruction without removing tissue

 IPSS improvement: **65–75%**

 ejaculation preserved: **70–90%**

 retreatment: **5–10% long term**

👉 A **highly effective option in small prostates**, often overlooked compared with more heavily promoted procedures.

ThuLEP ejaculation sparing

(selective enucleation / median lobe treatment)

Mechanism

- selectively removes the truly obstructing tissue
- can focus on the median lobe, which is frequently responsible for symptoms

 IPSS improvement: **70–80%**

 Qmax increase: **+15–20 ml/s**

 ejaculation preserved: **50–70%**

 retreatment: **<5%**

👉 This is the only ejaculation-sparing strategy that preserves a **true de-obstructive logic**, but it requires high surgical expertise and **careful case selection**.

A note on costs

Many ejaculation-preserving techniques carry **high costs** related to:

- single-use devices
- dedicated platforms
- technologies that may not be reimbursed by the healthcare system

👉 A higher cost does **not automatically translate into a better or more durable outcome**.

In several settings, expensive procedures may deliver a smaller improvement and a **higher risk of recurrence**, with the possibility of further treatments over time.

The value of a procedure is determined by the patient's stable, **tangible benefit, not by its price**.

How to read these data

The figures reported come from the scientific literature and from clinical experience. In medicine, **statistics are not absolute certainty**: they describe what happens in most cases, but **they cannot predict the outcome** in an individual patient.

👉 Choice of technique should be based on:

- prostate volume and anatomy
 - presence of a median lobe
 - symptom severity
 - expected durability of benefit
 - the patient's functional priorities
-

Ejaculation-preserving techniques **are not “wrong” by definition**, but they are not equivalent to **definitive de-obstructive surgery**.

They tend to work best:

- in **small prostates**
- in **carefully selected cases**
- when the patient understands the **risk of symptom recurrence**

👉 In medium-to-large prostates, the risk is not “avoiding surgery,” but **postponing a definitive operation**, with symptoms returning even within a short timeframe.

In urology, as in surgery more broadly, **“less invasive” does not automatically mean “better.”**

The goal is not the most advertised technique, but **the one that best fits that specific prostate—now and over time.**

BPH techniques – graphic comparison (effectiveness vs function)

Technique	De-obstruction	Preserves ejaculation	Durability of result	Ideal indication
Rezūm	●	● ●	●	Small prostates, without a median lobe
TPLA	●	● ●	●	Selected cases
UroLift	●	● ● ●	●	Small prostates, without a median lobe
Aquablation	●	●	●	Selected volumes
TUIP / ThuLIP	● ●	● ●	● ●	Small prostates
ThuLEP ejaculation sparing	●	●	● ●	Selected anatomy
Standard enucleation (HoLEP / ThuLEP)	● ● ●	●	● ● ●	All volumes

● ● ●	● ●	●	● ●	●	●	●
Maximum / Very high / Very long	High / Long	Good	Moderately high	Moderate	Low / Short	Very low