

PROSTATE ARTERY EMBOLIZATION



WHY IS AN ENLARGED PROSTATE A CONCERN?

As men age, their prostate grows; it's a fact of life. It's usually not a serious problem, but over 30 percent of men aged 50 and over require treatment for an enlarged prostate and for some of them that means surgery.

The prostate gland sits underneath the bladder and surrounds part of the urethra, the tube that carries urine and semen out of your penis. Normally, it's the size and shape of a walnut, but as men age it can sometimes get too big and start to squeeze the urethra. This is called benign prostatic hyperplasia (BPH).

BPH MAY LEAD TO SURGERY

BPH can disturb sleep with frequent urination overnight, cause difficulty urinating, or cause a weak stream.

The most commonly performed surgical procedure to treat BPH is a transurethral resection of the prostate (TURP). During a TURP, an instrument is inserted into the tip of your penis and extended through your urethra into the prostate area. Your doctor will then use it to trim tissue from the inside of your prostate gland, one small piece at a time, to remove the section of the prostate that is blocking urine flow. As small pieces of tissue are removed, irrigating fluid carries them into your bladder.

A MINIMALLY INVASIVE ALTERNATIVE TO SURGERY

Prostate Artery Embolization (PAE) is a minimally invasive procedure that may be an alternative to surgery for the treatment of an enlarged prostate. It is used to block blood flow to the prostate. A doctor, called an interventional radiologist, uses X-ray guidance to move a small plastic tube through the groin and into the small arteries which are feeding the prostate. Then tiny particles are injected into the arteries to starve the prostate of its blood supply, shrinking it.

PAE PROCEDURES ARE PERFORMED IN CALGARY

PAE procedures are covered under the Alberta Health Care Insurance Plan. Your doctor or specialist will need to fax a consultation request to Rockyview General Hospital's Diagnostic Imaging department at 403-592-4852. Once the information has been received our interventional radiology team will review the request and contact you to arrange a consultation to determine if the procedure is appropriate based on your medical history. There may also be imaging required.

COMPARING PAE AND TURP

PAE Benefits	TURP Benefits
It's less invasive with minimal risk of bleeding and other surgical complications.	It's a well-established procedure.
Larger prostates can be treated effectively with PAE.	Relief from prostate symptoms is rapid upon recovery from surgery.
There is usually no hospital stay required.	
There is no impact on ejaculatory function.	

PAE Risks	TURP Risks
Your prostate is slowly deprived of its blood supply, so it can take a little longer for you to see the full benefit of PAE.	Retrograde ejaculation: Ejaculation into the bladder is normal after TURP, occurring in almost all men who have the procedure. This does not affect erectile function, but alters the experience of ejaculation and affects your ability to father a child.
Difficulty in finding small prostate arteries may lead to PAE failure in around 10 percent of cases. In these cases, you may benefit from traditional TURP surgery.	Some studies have suggested risk of impotence after TURP, but this may not be a real finding.
As a relatively new procedure the long term effectiveness is unclear, although data up to around five years shows a good long-term benefit.	There are small risks of significant bleeding, infection, and incontinence associated with TURP.
There is a small risk of "non-target embolization" where particles go to the wrong area in the pelvis.	TURP isn't reliably effective with very large prostates.

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