

# MRI FUSION TRANSPERINEAL PROSTATE BIOPSY

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## WHO IS SUITABLE FOR AN MRI FUSION TRANSPERINEAL PROSTATE BIOPSY?

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MRI fusion Transperineal Prostate Biopsy is indicated for patients that:

- Have a nodule or other abnormality of the prostate, that has been detected during a digital rectal examination (DRE)

- Have enlargement of the prostate

- Have elevated levels of prostate-specific antigen (PSA) on their blood test

- Have an elevated PSA level, but an ultrasound-guided biopsy has come up negative for prostate cancer

- Have been diagnosed with prostate cancer previously, as part of their ongoing monitoring

## WHAT ARE THE ADVANTAGES OF THE MRI FUSION TRANSPERINEAL

## PROSTATE BIOPSY?

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MRI fusion transperineal prostate biopsy allows for the collection of a large number of samples efficiently and accurately

Enables the entire prostate gland to be sampled to visualize cell changes:

- Allows for the diagnosis of prostate cancer

- In cases where prostate cancer has been diagnosed, allows to check for any changes

MRI fusion prostate biopsy can be used to diagnose other conditions of the prostate such as:

- Enlargement of the prostate (BPH)

- Inflammation of the prostate, often caused by infection

- Changes in prostate cell type, that is not cancer (PIN)

No rectal bleeding

Significantly less risk of infection compared with transrectal (via the rectum) biopsies.

## HOW IS AN MRI FUSION TRANSPERINEAL PROSTATE BIOPSY PERFORMED?

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Before MRI fusion prostate biopsy can take place, the patient will have previously had an MRI scan of the prostate

MRI fusion transperineal prostate biopsy is usually performed under general anaesthetic, and takes around 30-60 minutes to complete

An ultrasound probe is inserted via the rectum, and using specialised technology, the live ultrasound image is fused with the existing MRI image

A special biopsy grid with holes 5mm apart is positioned against the skin behind the testicles (the perineum)

This allows the surgeon to collect biopsies from very specific areas of interest in the prostate.

## WHAT TO EXPECT AFTER AN MRI FUSION TRANSPERINEAL PROSTATE BIOPSY?



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You will be able to go home on the same day following your procedure

You may have some light bleeding in the perineal area, which is easily managed with gentle pressure

You may feel some discomfort in the area for a day

or two following the procedure

Some patients notice a small amount of blood in their urine or ejaculate in the days following the procedure, but this usually goes away within a week or so

Very rarely, the temporary inability to pass urine (urine retention) occurs; this can be fixed by temporary placement of a urinary catheter.

## PROCEDURE OUTCOMES OF MRI FUSION PROSTATE BIOPSY

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The recovery time is very brief and within a couple of days normal activities can be resumed. The samples are examined by a pathologist, and the results are usually available for review by your urologist within a few days. MRI fusion prostate biopsy helps to accurately diagnose and distinguish between cancer and other conditions of the prostate. If required, appropriate treatment can then be initiated.

Written by [Dr. Shekib Shahbaz](#) and [Dr. Tony de Sousa](#)

Urology Care Foundation, (2019), Exploring Transperineal Prostate Biopsy Facts, [

<https://www.urologyhealth.org/healthy-living/care-blog/2019/exploring-transperineal-prostate-biopsy-facts>], accessed 28/02/21.

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