Prostate MRI

What is multiparametric prostate MRI?

Multiparametric prostate MRI (magnetic resonance imaging) is a specialized form of medical imaging performed to help make a diagnosis of prostate cancer. It uses strong magnetic fields and computer technology to produce a series of detailed images of the prostate. It is used in conjunction with a clinical assessment to determine the need for prostate biopsy and to improve the accuracy in detection of prostate cancer.

PROSTATE MRI VIDEO

Who is suitable for Multiparametric MRI?

Your Urologist will determine the need for multiparametric prostate MRI based on a number of factors including:

- Age
- PSA level
- Prostate examination
- Family history of prostate cancer
- Overall health

Because multiparametric prostate MRI uses strong magnetic fields, a health questionnaire will be conducted prior to the scan to ensure your safety.

What are the advantages of Multiparametric prostate MRI?

Multiparametric prostate MRI provides your Urologist with important information as to the likelihood of an underlying prostate cancer. Not all cancers can be felt on prostate examination (DRE). Multiparametric prostate MRI may detect an area in the prostate which is suspicious for cancer and can enable a precise targeted biopsy (MRI-fusion

transperineal prostate biopsy) to sample that area. In addition to detection of prostate cancer, multiparametric prostate MRI can provide a detailed assessment of the prostate, including:

- Prostate size / volume
- Precise location of cancer within the prostate to allow nerve-sparing robotic prostate cancer surgery
- Prostate anatomy and relation to surrounding structures such as the rectum and bladder
- Presence of prostate cancer spread to other structures (metastasis) in the pelvic lymph nodes or pelvic bones
- There is no radiation involved

How is Multiparametric prostate MRI performed?

- You will change into a hospital gown and lie on a narrow table attached to the MRI machine for the scan
- The scan takes around 30-45 minutes to complete
- The radiologist may use an injection of a contrast dye to obtain detailed images
- This is a non-invasive, highly specialized diagnostic test

What to expect after multiparametric prostate MRI?

- The report and the images will be made available to your Urologist within a few days
- Your MRI-fusion transperineal prostate biopsy will be scheduled on a separate occasion
- The chances of a reaction the contrast dye is rare

Multiparametric prostate MRI outcomes

- It is not possible to make a definitive diagnosis of prostate cancer using multiparametric MRI alone
- The radiologist will assign a score, based on the likelihood of finding a ‘significant’ prostate cancer, that is, one that may have the

potential to cause harm
- The scoring system is known as PIRADS:
  - 1-2 low likelihood of significant prostate cancer
  - 3 indeterminant
  - 4-5 very high likelihood of significant prostate cancer
- A MRI-fusion transperineal prostate biopsy is required to sample the prostate tissue to make a diagnosis of prostate cancer
- Multiparametric prostate MRI is useful in allowing your Urologist to very accurately sample any suspicious areas with a targeted biopsy
- Multiparametric prostate MRI is not a perfect test – it is possible to have prostate cancer even with a normal MRI. Your Urologist will discuss the pros and cons of a MRI-fusion transperineal prostate biopsy to make a definitive diagnosis (or exclusion) of prostate cancer

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