


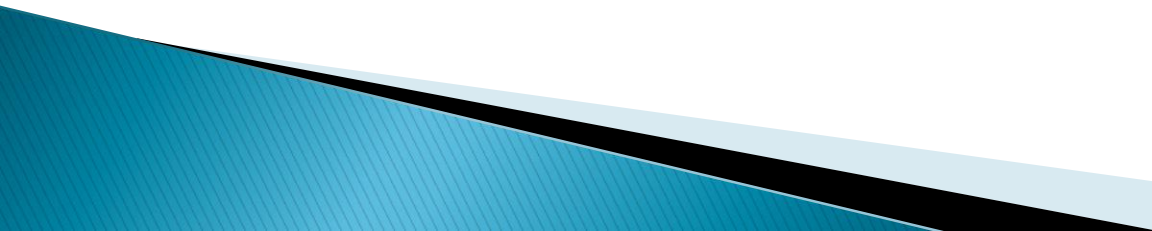
CRYOTHERAPY/CRYOSURGERY AND HIFU (High Intensity Focused Ultrasound) FOR THE TREATMENT OF LOCALISED PROSTATE CANCER

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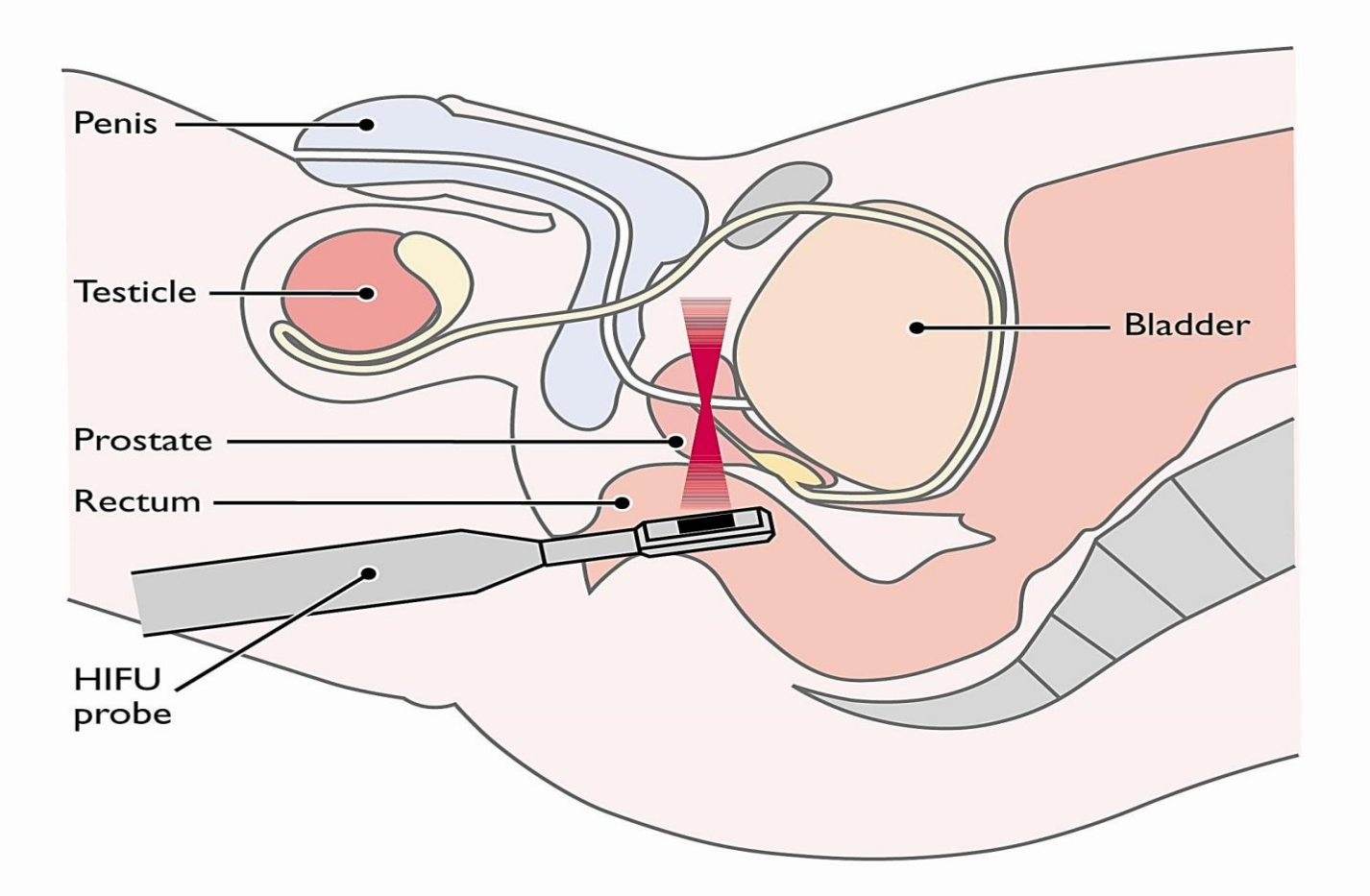
CRYO AND HIFU

- ▶ Both for organ confined localised prostate cancer (<40mls, PSA<20, Gleason ≤7)
 - ▶ Both only available at Specialist Centres or as part of a clinical trial (NICE)
 - ▶ Both “new” treatments with no long term data for survival rates
 - ▶ Both also used as 2nd line treatment after failed Radiotherapy/Brachytherapy
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HIFU

- ▶ Specialist centres / clinical trials only
 - ▶ Day case / overnight stay
 - ▶ Enema prior to treatment
 - ▶ GA / Spinal
 - ▶ Patient catheterised (urethral / suprapubic)
 - ▶ Heats and destroys cells (coagulative necrosis)
 - ▶ Cooling balloon surrounds the probe
 - ▶ 10g/hour so prostate size important
 - ▶ May need TURP prior to HIFU
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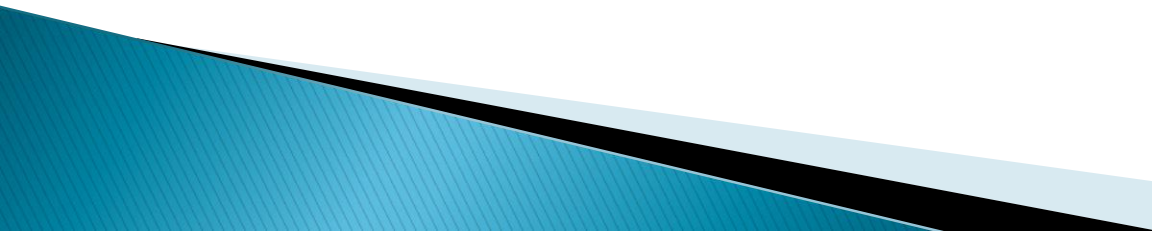
HIFU



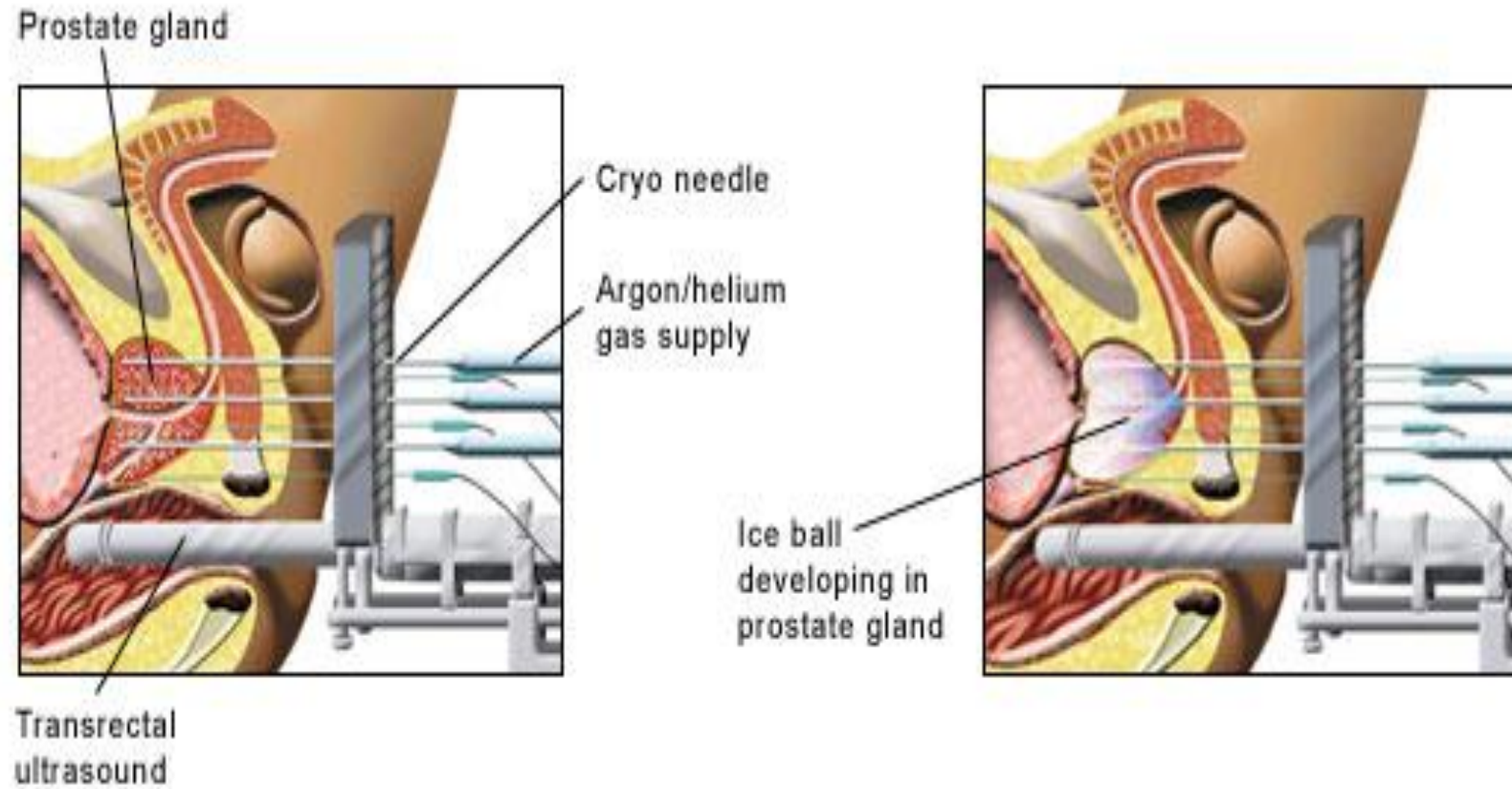
HIFU side effects

- ▶ Prostatitis / pain
 - ▶ Bladder irritability
 - ▶ UTI
 - ▶ Stress incontinence
 - ▶ Erectile Dysfunction
 - ▶ Prolonged urinary retention
 - ▶ Rarely prostatic abscess and rectal fistula
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Cryotherapy

- ▶ Specialist centres / clinical trials only
 - ▶ Day case / overnight stay
 - ▶ Enema prior to treatment
 - ▶ GA / Spinal
 - ▶ Patient catheterised (urethral / suprapubic)
 - ▶ Warming catheter inserted in urethra
 - ▶ Trans rectal probe inserted
 - ▶ Cryo needles inserted via perineum and argon gas cools them to -40°C
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Cryotherapy



Cryotherapy side effects

- ▶ Erectile Dysfunction
 - ▶ Tissue sloughing
 - ▶ Incontinence/bladder irritability
 - ▶ UTI
 - ▶ Pelvic/perineal pain
 - ▶ Salvage therapy has higher risk of side effects
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References

- ▶ European Association of Urology prostate cancer guidelines (*uroweb.org/wp-content/uploads/1607-Prostate-Cancer*)
- ▶ NICE interventional procedure guidance
- ▶ Orchid male cancer (www.orchid-cancer.org.uk)
- ▶ Prostate Cancer UK (prostatecanceruk.org)