



COMMITTEE:

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Annual subscription - \$5
from 1st January

VENUE:

Uniting Church Meeting Room
Seddon St, Ivanhoe

DAY CALENDAR 2014

Meetings: **10:00am -12:30pm**

- Wed 12th February '14
- Wed 12th March '14
- Wed 9th April '14
- Wed 14th May '14
- Wed 11th June '14
- Wed 9th July '14
- Wed 13th August '14
- Wed 10th September '14
- Wed 8th October '14
- Wed 12th November '14
- Wed 10th December '14

EVENING CALENDAR 2014

Meetings: **7:00pm -9:00pm**

- Thu 27th February '14
- Thu 27th March '14
- Thu 24th April '14
- Thu 22nd May '14
- Thu 26th June '14
- Thu 24th July '14
- Thu 28th August '14
- Thu 25th September '14
- Thu 23rd October '14
- Thu 27th November '14

**2014 SUBSCRIPTIONS
\$5**

The 2014 annual subscriptions are due from 1st January 2014. The rate is \$5 per individual, couple or family.

Prostate Heidelberg provides information, education and support for those affected by prostate cancer. At the meetings, we

1. *Show respect to members and speakers;*
2. *Allow people to speak and we listen;*
3. *Respect confidentiality;*
4. *Allow new ideas to be shared.*

DISCLAIMER

Information contained in this newsletter or discussed at meetings, should not take the place of proper medical advice from a qualified health professional. The services of a qualified health practitioner should be sought before applying the information to your particular circumstances.

The Prostate Heidelberg Cancer Support Group had sixteen attendees at the DAY meeting on 11th December 2013, followed by Christmas lunch at the Ivanhoe Hotel. Fourteen also attended the EVENING meeting on 28th November.

NEXT MEETINGS

Prostate Heidelberg's MEETING VENUE is the Ivanhoe Uniting Church Meeting Room, Seddon Street Ivanhoe (Melways 31 F8) - behind the Commonwealth Bank in Upper Heidelberg Rd. Car parking is available off Waterdale Rd behind the Ivanhoe Hotel. **There is no charge for attending.**

- The **NEXT DAY MEETING: 10:00 am to 12.30 pm, Wednesday 12th February 2014.**
- The **NEXT EVENING MEETING: 7:00 pm to 9:00 pm, Thursday 27th February 2014.**
- Partners or carers are welcome to all meetings
- Meetings are open to anyone interested in getting support on a cancer journey.

NEW PROSTATE CANCER WEBSITE

<http://www.prostmate.org.au/>

PROSTMATE is a personalised support system for men and their families dealing with prostate cancer. It has been developed in partnership with leading cancer agencies, researchers and clinicians. Get access to the latest research information, personalised support, specialised programs, and consultations with prostate cancer specialist nurses and psychologists.

It is free and easy to use.



BIOPSY - THROUGH THE PERINEUM

In men, the perineum is the part of the body between the scrotum and anus. Biopsies of the prostate through the perineum (transperineal) have two advantages over those through the rectum (transrectal). Firstly there is less chance of infection. Secondly access is better to the front of the prostate gland. Tumours at the front of the prostate gland can be missed in a transrectal biopsy, leading to a misdiagnosis.

Discuss the pros and cons of either form of biopsy with your surgeon before agreeing to a biopsy.

PROSTATE CANCER RADIATION THERAPY

By Prof Gillan Duchesne

A talk to Prostate Heidelberg on 28th November 2013 by Prof Duchesne who is Dean of Faculty of Royal Australian and New Zealand College of Radiologists. Primarily a cancer specialist, using radiation to treat cancer, until recently, she was Director of Radiation Oncology at Peter MacCallum Cancer Centre.

<http://www.targetingcancer.com.au/>

Radiation is a Primary Treatment for 1 in 2 Cancer Patients

1. Evidence shows that 1 in 2 cancer patients should have Radiation Therapy ("RT") as part of their cancer care.
2. Current Australian access levels range from 1 in 4 to approximately 2 in 5. On average, therefore at least 1 in 5 cancer patients are not having access to best care.
3. There is a great service expansion in RT during the last decade with Governments listening to our concerns.
4. But still there is the same shortfall because more people are getting cancer.

Patient Choice

Patients and the community should know their options. Every cancer patient should have the opportunity to seek an opinion about the applicability of Radiation Therapy to their cancer treatment options.

History of Radiation Therapy

The website, http://en.wikipedia.org/wiki/History_of_radiation_therapy, provides a good summary of the history of Radiation Therapy.

How Does Radiation Therapy Work?

The body's cells replace them-selves by division and multiplication in the body's control systems.

If damaged (e.g. by RT), normal cells can repair themselves and then, within the body's regulations, replace themselves.

But cancer cells, when damaged by RT, cannot repair themselves, and therefore cannot replace themselves.

RT consists of little energy packets that damage the cells' DNA. This happens whether the cells are normal or cancerous. Thus RT causes only cancer cells to die when they try to grow.

Types of Radiation Therapy

There are two types of Radiation Therapy:-

1. External Beam Radiation Therapy; and
2. Brachytherapy.

External Beam Radiation Therapy

External Beam Radiation Therapy ("EBRT") is the most common form of RT. EBRT is delivered by complex high energy machines (megavoltage e.g. 10 million volts) that deliver X-ray beams from multiple angles to the defined area or target in the body from a distance (tele-therapy).



A **major benefit** is EBRT can treat any part of the body and access is not a problem.

A **major drawback** is that beams cross normal body tissues to reach target.

Types of External Beam Radiation Therapy (EBRT)

1. Conformal RT
2. Intensity Modulated RT (IMRT)
3. Image Guided RT (IGRT)
4. Stereotactic RT
5. Stereotactic Ablative Body RT

Brachytherapy

Brachytherapy is from the Greek word meaning 'near' treatment. Brachytherapy is the insertion of radioactive isotope sources either temporarily or permanently into the cancer tumour.

A **major benefit** is the avoidance of dosing normal body tissues.

A **major drawback** is that Brachytherapy is hard to place where needed.

Temporary Low Dose Rate Brachytherapy

is for early low risk cancers

Benefits:

- Very limited dose to surrounding tissues.
- Single procedure.

Drawbacks:

- Limited suitability.
- Urinary function must be good.
- Operator dependent.
- It is relatively costly.

Permanent low dose rate

is often given with EBRT

Benefits:

- Very efficient means of increasing radiation dose, especially for higher risk patients; high doses given.
- Shorter overall treatment.

Drawbacks:

- Invasive.
- There is stricture risk.

The Radiation Therapy Treatment Path

1. Attendance for initial consultation

Decision to treat made, any further tests order, treatment prescribed.

2. Planning visit – External beam therapy

- Almost all plans require a CT scan for the planning computer to calculate doses.
- May have other imaging eg MRI, PET.
- May require immobilisation e.g. "flexicast".

3. Target contouring

- Tumour identified, small margin of normal tissue included in case of cancer spread.
- For prostate radiation therapy, generally treat the whole organ, even when apparently only a single nodule.
- Very individualised - the ultimate in personalised medicine.

4. Doses Calculated, and Dose Map Produced

- High radiation therapy dose to target.
- Dose to surrounding normal tissues low.
- Calculations and dose distribution approved.
- Plan checked and exported electronically to the treatment machine = Linear Accelerator (LinAc).

5. Patient attends for treatment

Patient attends daily for treatment, between one and potentially 40 treatments, usually 5 days per week, each visit about 15 minutes in treatment room.



6. **Prostate Localisation**

- The prostate is a mobile organ.
- The insertion of gold 'fiducial' seeds give the daily verification of the prostate's position before treatment.
- Radiotransmitter (Calypso) can monitor movement during treatment.

7. **Treatment delivery**

- Daily set-up checked.
- Gantry circles the couch, treating from a number of angles around the body.
- Intensity modulation and multi-leaf collimation of beams sculpts the dose.

Side-Effects of Radiation Therapy

Side-effects can depend on site treated, the dose and the schedule.

Side-effects can display

- **EARLY** - during treatment e.g. skin soreness ("burning"), loose bowels.
- **LATE** - longer term e.g. thinning of bowel lining producing rectal bleeding, can take several years to settle.
- **VERY LATE** (and rare) - possible secondary cancers 20+ years down the track
- **URINARY**
Early: Frequency, slow stream, discomfort.
Late: not common except HDR stricture (10%).
- **BOWEL**
Early: loose, frequent, discomfort, bleeding.
Late: twice daily, bleeding, mucus (less than 5%).
- **ERECTILE DYSFUNCTION**
Usually sexual functionality can recover to pre-RT functionality.

Role and place of Radiation Therapy

1. Many options available, with radiation therapy tailored to cancer stage and behaviour.
2. Overall, the cancer control is equivalent to surgery.
3. With a different side effect profile: most men live a pretty normal life.
4. Radiation therapy can be used after surgical failure.

Now and Future Radiation Therapy approaches

Stereotactic treatment

1. Originally just intra-cranial (targeted on the brain).
2. Technical specifications now so high and combined with cutting edge imaging and computer power the pinpoint precision is possible.

Cyberknife®

The CyberKnife® Robotic Radio-surgery System is a non-invasive alternative to surgery for the treatment of both cancerous and non-cancerous tumours anywhere in the body, including the prostate, lung, brain, spine, liver, pancreas and kidney. The treatment delivers beams of high dose radiation to tumours with extreme accuracy.

Truebeam®

TrueBeam® is a radiotherapy device, a linear accelerator, manufactured by Varian. The system dynamically synchronizes imaging, patient positioning, motion management, and treatment delivery. It is a versatile platform which can be used for all forms of advanced radiotherapy modalities including Image Guided Radiotherapy (IGRT) and Image Guided Radiosurgery (IGRS), Intensity-Modulated Radiotherapy (IMRT), Volumetric Intensity Modulated Arc Therapy (Rapid Arc), and Stereotactic Body Radiotherapy (SBRT) along with conventional and 3-D conformal radiotherapy.



Changing treatment paradigms into the future

1. Highly focussed therapy.
2. High doses possible in one to six treatments because normal tissues (which hate high doses) are avoided.
3. 4D radiation therapy with tumour tracking real-time.
4. Stereotactic ablative body RT - can treat (almost) anywhere in the body.

Comment: - There is a possibility to ablate early metastases!

Comment: - Extraordinary advances in technology are still to come!

Proton Therapy ("PT")

1. Particles instead of energy packets.
2. Collide with molecules in the tissues.
3. As a result, PT has a very defined range rather than just petering out.
4. Can be very useful when very sensitive organs are close to the tumour target.

Debate

5. PT is very expensive - \$200m rather than \$4m.
6. PT requires a very big facility - more than many hospitals can afford.
7. PT benefits only proven for paediatric cancers and a few other rarities e.g. ocular melanoma.
8. Other heavy particles may be better - but bigger and even more costly.
9. There is a risk of missing the target? - need imaging to be sure.
10. Currently patients can go overseas.
11. Self-funded or Department of Health's Medical Treatment Overseas Program for specifically recognised indications.
12. Possibly better for prostate cancer.
13. Australian population size can justify one PT facility. South Australia putting up it's hand up for the first.

PLEASE RETURN BOOKS or DVDs BORROWED from the LIBRARY

Prostate Heidelberg currently has a significant number of books and DVDs that have not been returned. The usual borrowing period is one month. There are other people who would like to use these library resources on their cancer journey. Please return them at the next available meeting. If you borrowed a book and since lost it, please send a note to that effect to prostateheidelberg@gmail.com. If the material is still in print, we can replace it.

FINANCIALS JANUARY 2014

As of 28th January 2014, Prostate Heidelberg had \$5,424 (26th November: \$5,975) in its NAB bank account and \$100 as a petty cash float.

MEETINGS FEBRUARY 2014

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www.ProstateHeidelberg.info

PCFA support group contact for Victoria and Tasmania is Amanda Pomery. Her email is amanda.pomery@pcfa.org.au. If you have not received the support you expected, or have suggestions you wish to give confidentially, contact Amanda.



USEFUL PROSTATE CANCER WEBSITES

ProstMate, individualised Prostate Cancer support www.ProstMate.org.au;

Prostate Cancer Foundation of Australia www.pcfa.org.au;

Cancer Council Victoria www.cancervic.org.au; HELPLINE - 13 11 20

Beyond Blue: www.BeyondBlue.org.au; HELPLINE - 1300 22 4636

Continence Foundation of Australia www.continence.org.au; HELPLINE - 1800 33 00 66

Royal Australian and New Zealand College of Radiologists www.targetingcancer.com.au;

Lions' Australian Prostate Cancer Collaboration www.prostatehealth.org.au;

National Cancer Institute: www.cancer.gov;

USA Prostate Cancer Foundation www.pcf.org

Life Extension www.lef.org;

Us TOO International Prostate Cancer Education and Support Network www.prostatepointers.org;

American Institute for Diseases of the Prostate www.prostateteam.com (Dr Charles "Snuffy" Myers);

Australian Advanced Prostate Cancer Support Groups website www.jimjimjimjim.com;

Commonwealth site for palliative care <http://www.health.gov.au/palliativecare>;

Banksia Palliative Care <http://www.banksiapalliative.com.au>