**CARE GUIDE**

**Care Management**

**Procedure**

**Radiation Therapy (RT): PELVIS**

**Statement of Intent**

The Care Guide is intended for use within Epworth HealthCare.

Its purpose is to enhance delivery of care, coordination and communication

With respect to individual patient care, and may be revised to meet individualised care needs. **Care Guides never replace clinical judgement, nor do they replace Doctor’s orders**. It is expected that contemporaneous notes will be documented by all clinicians each shift.

**Definitions**

**Radiation Therapy (RT)**: is the use of high energy radiation to kill cancer cells or injure them so they cannot multiply and grow. It is an effective and commonly used cancer treatment. RT aims to destroy as many cancer cells as possible whilst limiting the injury to surrounding normal, healthy tissue.

**RT Dose:** Radiation Oncologists prescribe the radiation dose (total dose). The dose is dependent on the location and type of tumour and the treatment intent.

**Gray:** RT is measured in a unit dose referred to as Gray (Gy). Gray is the amount of energy deposited or absorbed into a mass of tissue.

**Fractionation:** Divides the total dose of radiation into smaller doses delivered over a period of days to weeks.This allows the tumour to receive a lethal dose of radiation, while maintaining as much healthy tissue as possible.

**CT Planning / Simulation:** Prior to beginning a course of RT the patient is required to attend a non diagnostic CT scan and a plan is formulated to ensure treatment delivery is accurate. This scan allows radiation therapists to determine the exact position the patient will need to be in during all treatments. Patients generally require tiny tattoo markings, moulds or casts to assist the radiation therapists to replicate the position.

**Background**

RT to the pelvis is indicated in many types of cancers including:

* Gynaecological (e.g.: cervix, uterus, ovaries)
* Gastrointestinal (e.g.: rectum, colon)
* Urogenital (e.g.: prostate, bladder, penile)
* Metastatic disease.(e.g.: pain, bleeding)

**Admission management**

Patients receiving RT may need to be admitted for the complete treatment course if the side effect profile is high or the patient is unwell. Some patients may require intermittent admissions if they are unable to cope with side effects at home or have co-morbidities that require hospitalisation and support.

Admit directly to ward.

Please refer to doctor preferences to ensure compliance with admission management.

**Risk Assessments**

* Falls MR46
* Patient Transfer, Mobility MR46A
* Pressure Area MR46C
* VTE MR46D

The Safety and Risk assessments are to be completed as per recommended frequency. If patient condition alters refer to the risk assessments and update strategies as required.

RT nursing staff will provide a RT nursing care plan (RNCP). The RNCP (if available) includes an image of the treatment area and treatment details to assist with patient assessment; identify potential side effects and provide management strategies.

**Multidisciplinary Team** It is imperative to work and liaise effectively within a multidisciplinary team, to improve patient outcomes. Allied health interventions for these patients may include: dietetics, occupational therapy, physiotherapy, psychology, social work.

To involve allied health disciplines, check the referral criteria to ensure a referral is appropriate. If unsure of this, contact the NUM or allied health department.

**Side Effects / Risks**

RT side effects are specific to the site being treated. Side effects are generally temporary and manageable and resolve two to four weeks after completion of the course of RT.

**Gastrointestinal Tract**

RT can damage the mucosal stem cells which line the gastrointestinal tract. Side effects may include:

* Diarrhoea
* Constipation
* Mucous production resulting in vaginal and/or rectal discharge
* Proctitis (inflammation of the anus resulting in ineffectual straining to empty the bowels)
* Tenesmus (feeling of needing to pass a stool, despite an empty colon).
* Faecal incontinence

**Renal System:**

Symptoms may include:

* Haematuria
* Frequency and burning
* Nocturia
* Incontinence
* Bladder spasm
* Urinary retention

**Reproductive System:**

A possible side effect of RT to the pelvis is the development of vaginal stenosis. The use of vaginal dilators is therefore indicated. Patient education will be provided in the RT department.

**Skin:**

The skin has a high cellular turnover rate making it more susceptible to RT induced damage. Skin reactions are generally associated with doses of 20Gy and above. Management of skin reactions aims to maintain a moist, clean environment for wound healing and to promote patient comfort.

**Fatigue:**

Fatigue is one of the most common side effects of cancer and treatment regimens. If fatigue is directly related to treatment it will generally improve post radiotherapy.

**Psychosocial :**

RT involving reproductive organs in both males and females can lead to infertility, loss of libido, vaginal dryness and erectile dysfunction. Early identification of psychological distress and prompt referral to supportive care services is imperative.

The Care Guide assists in achieving an **expected length of stay** target.

If the LOS extends beyond what is routinely expected it may indicate that complications, unexpected clinical outcomes or co-morbidities have impacted on the patient clinical recovery.

Please ensure that this is clearly documented in the progress notes.

|  |
| --- |
| **Daily Care**  |
| **I** | Introduce staff caring for the patientUpdate whiteboard and hourly rounding documentation |
| **S** | Specifically Patient identified Reason for admission: **RT – Pelvis –** specify diagnosis, treatment intent and site of treatment |
| **O****B****S****E****R****V****A****T****I****O****N****S****\_****A****S****S****E****S****S****M****E****N****T****S** | **CNS** | Alert and orientated (GCS).**PAIN MANAGEMENT**:On admission: Baseline assessment of pain, current analgesia regimen and effect Clinically assess if patient requires analgesia pre-med prior to RT  appointments (refer to RNCP if available)Daily: Assess and document changes in pain, analgesia requirements, pre-med requirements Ensure patient comfort (i.e. able to move, DB&C) |
| **CVS** | **VITAL SIGNS**: On admission and 4/24 as per hospital policy.**IVC** – May be required for hydration/medication administration.  Check site and rate Document: re-site date (48-96 hours).**PACEMAKER** - Document details and notify RT department If the patient has a pacemaker. |
| **Resp** | Encourage DB & C.Encourage the patient to SOOB. |
| **Renal** | On admission: Document normal voiding pattern, and note any reported: * Nocturia.
* Frequency.
* Haematuria.
* Incontinence and aid used.
* History of urinary tract infections (UTI’s).
* Surgery to treatment area.

Encourage an adequate fluid intake (1-2.5 L/day). Daily:Document changes from baselineManage side effects as per the management guidelines in the RNCP (if available).A FWT should be performed when urinary symptoms arise or if infection is suspected. |
| **GIT****Endocrine/Metabolic** | Weight : on admission/weeklyCheck bowels have been opened in last 24 hours. Document pt’s normal elimination pattern and note:* Stool consistency
* Frequency.
* Pre-existing conditions
* Incontinence and aid used.
* If BNO may require aperients (constipation is to be avoided).

Encourage a balanced diet.Refer to dietitian if required.Daily: Document bowel statusManage diarrhoea as appropriate and monitor fluid intake.Ensure that bowel function is normal prior to discharge, to avoid re-hospitalisation. |
| **Musculo-skeletal /ADLs** | Patient is to be offered / assisted with hygiene once settled into ward.Encourage mobility and exercise as this helps to reduce fatigue.Assess falls risk - patient to attend RT department on a bed if assessed as a falls risk. Notify the RT department. |
| **Skin****Integrity** | Assess skin integrity on admission/dailyIn the radiotherapy treatment area:* Avoid products containing alcohol, zinc and aluminium (Soap, some skin care products and deodorants).
* Moisturize skin twice a day with simple aqueous cream.
* Avoid extreme temperature to the treatment area (DO NOT use heat/cold packs).

If skin integrity impaired refer to RNCP (if available) or contact RT nursing staff for instruction - maintain a moist, clean environment for wound healing and promote patient comfort.  |
| **Psycho-****social** | Document the patients understanding of treatment intent and potential side effects.Assess existing social supports.If applicable refer to social work, psychology, occupational therapy or community services. |
| **B** | Investigations: Urinalysis on admission. Possible radiology investigation.Other pathology / investigations as per Doctor. |
| **A** | Risk assessments attended as per hospital protocol.Risk interventions and strategies reviewed as required.Anti-embolic stockings to be worn unless contraindicated. |
| **R** | Refer to Doctor orders/preferencesCommence discharge plan, consider allied or community referrals if discharge concerns.Ensure patient/family aware of discharge time by 0930, and expected LOS. |
| **Specific Care Instructions and Information*** Contact consultant to advise of admission and to seek management and medication orders.
* Check the RNCP (if available).
* Ensure pre-treatment medications are given where required.
* Consider appropriate allied health referrals.
* Note time of scheduled RT sessions.
* Liaise with RT nursing staff when required.
 |

**References**

Camporeale, J. (2008). Basics of Radiation Treatment. *Oncology Nursing*, 12(2):193-196.

Faithful, S. (2003). *Supportive care in radiotherapy*. Radiation skin reactions (pp.135-158). Edinburgh: Churchill Livingstone

Ganeshan, D., Salem, U., Viswanathan, C., Balachandran, A., Garg, N., Silverman, P., & Bhosale, P. (2013). Complications of oncologic therapy in the abdomen and pelvis: a review. *Abdominal Imaging*, *38*(1), 1-21.

Gwynne, S., & Staffurth, J. (2012). Principles of cancer treatment by radiotherapy. *Surgery (0263-9319)*, *30*(4)

<http://emedicine.medscape.com>, Accessed online September 2013.

<http://macmillan.org.uk>, Accessed online September 2013.

<http://my.clevelandclinic.org/disorders/cancer/hic_cancer-related_fatigue.aspx>, Accessed online October 2013.

<http://www.cancer.gov/cancertopics/coping/radiation-therapy-and-you/page6>, Accessed online September 2013.

<http://www.cancervic.org.au/about-cancer/types-treatments-trials/radiotherapy/side_effects_of_radiotherapy.html>, Accessed online September 2013.

<https://www.eviq.org.au/Category/tabid/65/categoryid/4/Default.aspx>, Accessed online October 2013.

Yarbro, C., Frogge, M., & Goodman, M. (2005). *Cancer Nursing: Principles and Practice. (6th Ed).* Jones and Bartlett Publishers: Sudbury.

Zeman, E.M. (2000). *Biological basis of radiation oncology*. L.L Gunderson & J.E Teooer (Eds.), Clinical radiation oncology (pp. 1-41). Philadelphia: Churchill Livingstone

**Revision History**

Issued:March 2014

Date of last review: October, 2014

Date of next review: October, 2016

Developing team: Margie Hjorth, Linda McGinn, Radiation Oncology Team and

Marg Crowhurst and Melanie Gordon, Nursing Care Guide Project Team.