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Original Article

The production of a Best Practice Statement in the skincare of patients receiving radiotherapy

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Abstract

Radiotherapy skin care is a contentious issue surrounded by myth, damaging and frightening stories and unfounded guidance. This is compounded by the fact that, when seeking information, patients, relatives and staff are faced with a barrage of conflicting, poorly researched data. Each of the five Scottish cancer centres worked together to produce guidance for all health professionals who are involved in the care of patients with radiotherapy skin reactions. As a result, a "Best Practice Statement" has been produced to give an overall view of radiotherapy skin reactions and their recommended care. This will guide best practice and dispel the many myths of care, which are still in existence, thus ensuring that equity of best practice care is available to all patients.

Keywords

Radiotherapy; skincare

INTRODUCTION

The incidence of cancer within the general population is increasing and Scotland is no exception. Approximately 25,800 new cancer diagnoses are made each year and predicted to rise. Radiotherapy is a major modality in treating cancer. Approximately half of those people diagnosed with cancer will receive radiotherapy as a treatment within their cancer journey; therefore, skin care will become more of an issue for patients and staff.[1] One of the most common side effects from radiotherapy, wherever the site, is skin damage. Radiotherapy-induced skin reactions as with other tissue reactions are caused by biological damage.[2–8] Some estimations are of 80–90% of patients receiving radiotherapy will experience some degree of skin damage, although only 10–15% will progress to moist desquamation.[8–10] Current literature on care of skin throughout radiotherapy is inconclusive but can be contradictory. There have been studies using many different creams and dressings, which have been shown to make no difference to or influence the development of a skin reaction in only a small way. Much of the literature has failed to fully acknowledge other factors that can influence skin reactions such as smoking, co-morbidity, skin folds or nutrition.[11,12] The result of the many different suggestions on care have resulted in fragmented, non- evidence based care that is different within each setting the patient visits whether that be in primary or hospital based care.[3,4,13] Since publication of the Best Practice Statement[14] small studies have been published suggesting benefits associated with the use of prophylactic topical applications in the management of skin reactions.[15,16]

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DRIVERS FOR CHANGE

Radiotherapy can cause significant skin reactions. Research suggests that skin care practices are diverse for patients receiving radiotherapy. In 2001 Glean et al.[13] stated that there was little agreement in the UK regarding the management of skin reactions. Whenever it is possible, clinical practice should be evidence based. As part of a review of current practice in the Radiotherapy Department in Ninewells Hospital, Dundee it was agreed that an evaluation of care of radiation skin reactions should be carried out with the aim to develop an evidence based approach to managing skin reactions. NHS Quality Improvement Scotland (NHS QIS) was approached for advice and support. The purpose of NHS QIS is to improve the quality of healthcare in Scotland by setting standards and monitoring performance, and by providing NHS Scotland with advice, guidance and support on effective clinical practice and service improvements. Their key aim is to identify areas of practice amenable to the production of best practice statements. These statements would offer guidance on good practice, relating to specific areas of practice and to encourage a consistent and cohesive approach to care.

WHAT IS A BEST PRACTICE STATEMENT?

NHS QIS define a Best Practice Statement[14] as a statement to describe best and achievable practice in a specific area of care. It reflects the commitment of NHS QIS to sharing local excellence at national level. Best practice statements are underpinned by a number of shared principles. Amongst these are

- Best practice statements are intended to guide practice and promote a consistent and cohesive approach to care.
- Statements are derived from the best available evidence at the time they are produced, recognising that levels and types of evidence may vary.
- Information is gathered from a broad range of sources in order to identify existing or previous initiatives at local and national level, incorporate work of a qualitative nature and establish consensus.
- Statements are targeted at practitioners using language that is accessible and meaningful.
- Consultation with relevant organisations and individuals is undertaken.
- Responsibility for implementation of statements will rest at local level.
- Statements are reviewed and updated every 3 years.

Development of the Best Practice Statement was implemented as outlined below. A systematic process was followed. The development process began in 2002 led by a core working group (Appendix 1) comprised of therapy radiographers, nurses and academics. All five Scottish Cancer Centres were represented and supported by a wider reference group (Appendix 2).

In gathering and reviewing evidence and examples of practice, the working group soon became aware that, not only was there a variation in the treatment of skin reactions between cancer centres, but within each centre, different consultants each had a differing view of what constituted best practice. Also, written information given to patients regarding the care of their skin during and after their radiotherapy, was either different between centres (and individual consultants) or non-existent.

It was also apparent that on completion of a course of treatment, the patient was usually at home. Any treatment, which became necessary for their skin reaction, (reactions are usually at their worst approximately 10 days after completion[13]), would be dealt with by a health professional out with the cancer centre, and so this opened up yet another potential for inconsistency.

Using the NHS QIS Best Practice Statement format, a draft statement was produced by the working group. From the review of current literature[13,17–19] it became apparent that there was a need to establish regular skin scoring throughout treatment. By consensus, it was agreed to use the Radiation Therapy Oncology Group (RTOG) Assessment Tool[20] as it was thought to be most widely known and most commonly used. This is a clinical guideline recommended for use by the College of Radiographers.[17]

The draft statement was sent out to the wider reference group for comment. As a result of this consultation process, the statement was revised.

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A number of launch events were organised across Scotland to highlight the publication of this Best Practice Statement. NHS QIS distributed copies of the Best Practice Statement throughout NHS Scotland. In accordance with NHS QIS guidelines, this statement will be reviewed in 3 years and will consider whether the following outcomes have been achieved.

EXPECTED OUTCOMES

Impact on patients

- Improved consistent information – both locally and between centres to all patients.
- Care based on best available information.
- Consistency of care throughout treatment and after in Primary Care.
- Better informed of rationale of skin damage and particular risk factors.
- Partnership in their own care, addressing risk factors independently with their own knowledge.

Long term outcomes

- Good standards of care across all care settings.
- Improved care based on consistent skin scoring.
- Ability to access best practice statement easily even if type of care is infrequent.
- Communication network established between all health care professionals involved in patients' care.

Potential for the future

- Evidence of scoring and care provision will be available in order to facilitate audit.
- A solid platform of consistent care will exist on which to build future research.
- Multi-centred links for future skin care research will have been established.

WHAT DOES THE BEST PRACTICE STATEMENT MEAN FOR RADIOGRAPHERS?

The statement has now been published, having been reviewed extensively by a further wide group of experts in the area of radiation skin reactions (Appendix 2). The onus of responsibility to ensure this best practice is available to all patients lies with each centre and each health professional within the centre.

Radiographers must take this challenge on board and steer it locally to ensure patients undergoing treatment in each centre receive the best care possible.

This means

- Good communication with the patient at the beginning of their course of treatment to make them aware of the risk factors regarding any possible skin reaction. If the patient is made aware of the risks, then it encourages them to take responsibility for their skin. If they understand the rationale behind their skin care instructions then they are more likely to be compliant.
- Consistent use of a recognised skin assessment tool from Day 1 is essential to ensure appropriate skin care from the beginning of the treatment course.
- Local protocols must be produced identifying roles and responsibilities of radiographers and treatment centre nurses with regard to information, skin scoring and interventions recommended.
- Collaborative working with all health professionals involved in the care of patients undergoing radiotherapy to ensure that the care to the patient is seamless. This information should be incorporated into patient information that leaves the centre with the patient at the end of treatment. Community health professionals need access to information regarding the patients' ongoing skin care. Although the best practice statement will be available to community staff, reference to its use should perhaps be made in the local information leaflets with addresses and website links noted for ease of access for all.
- Documentation is essential and a reliable system suitable for future audit must be set up now in order to ensure that skin care is an ongoing process and future best practice statements will have solid evidence on which to base their recommendations. Local centres should be looking now to set up a database for future audit and review of the Best Practice Statement, which is due in 3 years time.

CONCLUSION

The Best Practice Statement makes a significant start to ensuring equity of care for all patients

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undergoing radiotherapy in Scotland. By adhering to the statement, clear evidence can be collated using recognised skin scoring assessment tools and clear documentation, through all stages of the patient's care, which will lead to future practice developments. These future developments will be evidence based and not, as at present, based on historical and anecdotal evidence.

It is vital that patients are given good information regarding the care of their skin throughout their Radiotherapy journey. By understanding the rationale behind this advice, they are more likely to comply. Radiographers, who see the patient's skin every day, should now skin score regularly throughout a course of treatment and ensure that the documentation is easily accessible to all health professionals involved in the patient's care.

It is well documented that radiotherapy skin reactions routinely reach their peak after the course of treatment is complete. This is the period of time when the patient is likely to require health care support and expertise. However, this is when the patient will not attend the treatment centre and will rely on the community-based professionals to ensure guidance for their skin care. Often this is the time when communication between hospital based staff and community staff is less than perfect, resulting in a disjointed service to the patient.

The Best Practice Statement can be viewed on the NHS QIS website: www.nhshealthquality.org. It is also available on request from NHS QIS.

By providing easy access to the Best Practice Statement for all sectors of the professional team, it is hoped that all patients will receive the quality standard of care to which they are entitled.

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APPENDIX 1

Core group

Carole Hornsby	Treatment Superintendent Radiographer, Ninewells Hospital, Dundee
Janice Fletcher	Macmillan Clinical Nurse Specialist (Radiotherapy & Oncology), Ninewells Hospital, Dundee
Gill Chadwick	Cancer Nursing Development Co-ordinator, NHS QIS
Mo Beange	Senior Therapy Radiographer, Raigmore Hospital, Inverness
Jillian Moses	Practice Development Radiographer, Aberdeen Royal Infirmary
Irene Loch	Out Patient Sister, Beatson Oncology Centre, Glasgow
Anne McIntyre	Breast Care Specialist Therapy Radiographer, Beatson Oncology Centre, Glasgow
Sheila MacBride	Lecturer in Cancer Nursing, University of Dundee, formerly Macmillan Senior Clinical Nursing Facilitator, Edinburgh Cancer Centre
Lynn Magro	District Nurse & Palliative Care link nurse, Tayside Primary Care Trust
Ann McLinton	Practice Development Facilitator, Beatson Oncology Centre, Glasgow
Julie Mencharowski	Staff Nurse, Treatment Floor, Edinburgh Cancer Centre
Anne Moffat	District Nurse, Lothian Primary Care Trust
Patricia Simpson	Out Patient Sister, Edinburgh Cancer Centre
Lynne Watret	Clinical Nurse Specialist: Tissue Viability, Greater Glasgow Primary Care Trust
Mary Wells	Clinical Research Fellow, School of Nursing & Midwifery, University of Dundee

APPENDIX 2

Wider reference group

Margaret Craig	General Practitioner, Glasgow Primary Care Trust
Pearl Elliot	Patient representative, Borders
Anna Gregor	Clinical Oncologist, on behalf of SCAN and Lead Cancer Clinician for Scotland
Maggie Grundy	Macmillan Lecturer, Robert Gordon University, Aberdeen
Susan Jackson	Lecturer, Paisley University
Cathy Macinnes	Patient representative, Western Isles
Mary MacLean	Regional Cancer Care Pharmacist, on behalf of Scottish Oncology Pharmacy group
Liz McNiven	Community Palliative Care Nurse, on behalf of the Community Palliative Care Team, Marie Curie Centre, Fairmile, Edinburgh
Cathy Meredith	Lecturer, Glasgow Caledonian University
Gaye Paterson	Cancer Care Research Team, Dept. of Nursing & Midwifery, University of Stirling
Nick Reed	Clinical Oncologist, on behalf of WoSCAN
Ann Marie Rice	Lecturer, Macmillan Education Unit, University of Glasgow
Leslie Samuel	Clinical Oncologist, on behalf of NoSCAN
Jenny Whelan	on behalf on Cancer BACUP, Scotland

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