Nottingham University Hospitals’ award-winning Late Effects service
Emma Hallam, Liz Stones & Dr Judy Christian - Radiotherapy Centre, Nottingham City Hospital

**Introduction**

It is estimated that at least 500,000 people living with and beyond their cancer have one or more physical or psychosocial consequences from their treatment that affects their lives on a long term basis.\(^1\)

Advances in radiotherapy techniques have reduced acute and late toxicities but a wide range of chronic morbidities in long term cancer survivors are being seen.\(^2\)

Radiotherapy (RT) late effects are side-effects that occur 6 months or more post-treatment. The Nottingham University Hospital (NUH) Late Effects clinic is a unique self-referral service for any patient who is experiencing a late side-effect from their RT treatment. It is staffed by radiographers who work daily with RT and hence have an excellent understanding of RT dose distributions, acute RT complications and innovative RT techniques - such as Intensity Modulated Radiotherapy - specifically designed to reduce RT late effects.

**Clinic Criteria**

All patients must be 6 months post-radiotherapy completion.

Patients are assessed using the Nottingham LENT (Late Effects of Normal Tissues) Tool, which has been developed from the well-established LENT SOMA (Subjective, Objective, Management, Analytic) scoring system, and the Macmillan scoring checklist provides holistic needs assessment.

Patients scoring 2 or below on the Nottingham LENT Tool are provided with advice from clinic radiographers.

Patients scoring 3 or above will be asked by their GP to be referred to the relevant consultant on the specialist Late Effects clinical pathway.

All patients are followed up 3 months post-attendance in the clinic to see if the advice provided was helpful and/or to see if the specialist referrals have been carried out.

The Macmillan concerns checklist is completed again at this point and any new symptoms/issues are reassessed.

**What makes our service unique?**

- Self-referral service for any post-radiotherapy patient, regardless of tumour/treatment site
- Only centre in the country that offers this service
- Complete review of patient history and treatment plan prior to clinic appointment
- Welcoming, friendly, holistic consultation with no time constraints
- Clear, highly specific information sheets
- Follow-up service - either in person or by phone
- A point of contact and co-ordination for patients’ onward survivorship journey
- Reproducible service having had 6 departments review our practice and paperwork
- Every patient is treated as an individual
- Direct links to the HOPE course
- We liaise with primary care and share our knowledge

**Quality in Care Oncology Winner 2016**

*Judges’ Comments:*

“This work simply ticked all the boxes and showed good use of a multidisciplinary team to enhance quality of life. It provides holistic care by tapping into and utilising existing expertise, to meet a major unmet need. A leader in its intervention, this programme has simple aims that are expertly executed and the delivery is superb.”

**References:**


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Achievements & Results

A massive improvement in quality of life. Few interventions in this complex group of patients have ever show any ability to improve their QOL. Concerns Thermometer, Macmillan 7-1

Setting up a revolutionary service on uncharted ground.

Pathway mapping and discussion with like-minded health professionals with a key interest in late-effects and survivorship.

Sourced and gained specific training required to manage this complex group of patients.

Our biggest achievement is the difference we are making to these patients, and their testimonials.

Data from the first 18 months of our service

<table>
<thead>
<tr>
<th>Outcome of attending the RTLE clinic</th>
<th>Patient numbers</th>
<th>% of all patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice only</td>
<td>38</td>
<td>40%</td>
</tr>
<tr>
<td>Referral to other medical/dental clinic</td>
<td>16</td>
<td>16.8%</td>
</tr>
<tr>
<td>Referral to AHP service (e.g. physio, pain acceptance clinic, etc.)</td>
<td>41</td>
<td>43.2%</td>
</tr>
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</table>

Mean reduction in distress thermometer scores = 3.45

The Macmillan eHNA provides a solid platform for every consultation and the distress scale is used to evaluate the effectiveness of the clinic appointment and interventions/referrals made.

Patient Quotes

“The service is really needed”

“Very helpful and informative”

“Amazing - light at the end of the tunnel”

“Provided me with the motivation to carry on”

“She really gets it, I can see it in her eyes that she understands. Giving me a sense of relief”

“Gave me hope that the ever current problem may be able to be controlled”

“I felt relaxed and comfortable as we both explored symptoms associated with my conditions. Everything was explained in easily understood language and it was so good having someone listen, understand and explain without being dismissive. She was so kind.”