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CARING FOR CHILDREN UNDERGOING RADIOTHERAPY

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Giving radiotherapy to children has always been a difficult task. The child and its parents are frequently highly stressed by visits to the radiotherapy department, often requiring the child to be sedated and this has a further damaging effect on their view of treatment and the staff involved. At the Wessex Radiotherapy Centre, a paediatric radiographer has been appointed whose responsibility is to oversee the course of treatment and provide information, support and encouragement to the whole family. This initiative has had a beneficial impact on the department and the families involved.

Key words: paediatric; cancer; accuracy; reproducibility; radiographer.

INTRODUCTION

Many adults are apprehensive about their first visit to a radiotherapy department and their subsequent treatment [1]. Lack of knowledge and an array of myths and half-truths about cancer treatment will exacerbate an already vulnerable emotional state which follows from the initial diagnosis [2]. Over the past few years considerable advances have been made towards addressing these concerns with adult patients. For example, most radiotherapy departments now provide written information about the treatment and what it will entail prior to the first visit. In addition, many departments employ specialist cancer care radiographers or nurses who provide additional support of a practical and emotional nature. Although the Department of Health produced a document in 1991 about general issues concerning the welfare of children and young people in hospitals [3], the needs of the young child with a diagnosis of cancer undergoing radiotherapy have, until recently, not been properly addressed, nor indeed have the needs of parents with a child undergoing radiotherapy.

In paediatric units, continuity plays an important role in children's care, much of which is achieved by primary nursing [4]. In the radiotherapy department, children visit the mould room, planning and treatment units, each with its own team of radiographers, and continuity is hard to achieve.

BACKGROUND

Experience at The Wessex Radiotherapy Centre showed that young children undergoing radiotherapy were apprehensive about visiting the department and their radiotherapy treatment. For many children this was their first experience of an adult

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hospital environment and parents indicated that their children were particularly fearful of the radiotherapy machines. The anxiety of the children was further increased by brief periods of separation from their parents during treatment. Research findings also suggest that the diagnosis of cancer will affect the whole family, parents and siblings [5], and a strong relationship was found, in one study, between child behaviour problems and parent depressive symptomology [6]. Therefore, a series of visits to a radiotherapy department may not be a welcome experience for either the child or the parents.

The role of the paediatric radiographer at the Wessex Radiography Centre, rather than being based upon a formal appraisal of need, evolved from the practical experiences of radiographers treating children. It became apparent to the superintendent radiographer that a senior II radiographer, who was known to be particularly adept at dealing with children, was becoming more involved with supporting the child and the parents throughout the course of treatment. As a consequence of this radiographer's involvement, children were more relaxed and easier to treat than had formerly been the case. Parents also informally reported that they were less anxious and more likely to ask questions of someone who was showing a particular interest in them.

On the basis of such positive comments from parents and radiography staff, it was decided to make the arrangement explicit and convert an existing post to that of paediatric radiographer. This would allow more formalized training to be undertaken, not only by the designated radiographer but also by staff who would stand in for the paediatric radiographer in his or her absence. It would also allow the contribution by the paediatric radiographer to the family and to the radiotherapy department to be analysed more fully. Whilst it might be argued that all radiographers should receive formal training in the management of children undergoing radiotherapy and in supporting parents, in practice too few children (i.e. between 22–25) pass through the radiotherapy department in a year for any substantial experience to be gained.

Key functions of the paediatric radiographer

The introduction of a paediatric radiographer in this department, whose responsibility is to provide continuing support, encouragement, information and to facilitate movement throughout the clinical environment, has produced considerable benefits, not only for the child but also for the parents. In addition to the normal duties associated with a senior II radiographer post in a radiotherapy department, the paediatric radiographer's duties include:

- greeting and introducing the child and family to key personnel involved in the treatment;
- answering questions related to the treatment, care and welfare of the child;
- accompanying the child and parents to the clinic appointment with the consultant oncologist;
- arranging the appointments for the mould room, simulator and treatment;
- accompanying the child to the mould room and simulator sessions;
- attending the first treatment and introducing the staff who will be responsible for the subsequent treatments;
- attending the relevant review clinics;
- meeting the child and parents regularly during the course of radiotherapy.

Therefore, in addition to working within the department, the paediatric radiographer meets the children and their parents at their first consultation with the consultant

clinical oncologist. The family are given a guided tour of the department, which will include visiting the children's waiting room, mould room, simulator planning and treatment unit. During this tour the radiographer will answer questions and introduce the family to the members of staff whom they will encounter during their treatment period. Appointments are confirmed before the family leave with special emphasis to ensure that, as far as possible, they fit in with other family commitments. The paediatric radiographer assists at all mould room and planning sessions and the first few treatment appointments. On subsequent attendances the radiographer will greet the family and, if necessary, arrange for the child to be seen by the consultant and ensure that any actions that are required are executed.

Training for this post follows the form of the Oncology Course for Nurses, with visits to paediatric wards and links formed with play-leaders. A second senior II radiographer is now undergoing training. This will ensure that a specialist radiographer is always available for all young patients and parents. Mutual support and exchange of experiences and ideas should further enhance quality of care and treatment.

Our experience suggests that parents benefit enormously from the continuity of having a paediatric radiographer, who often becomes a close ally or friend, coordinating the whole course of treatment from day 1 to the completion of the last treatment. Research suggests that parents who are well informed, confident and relaxed are less likely to convey their uncertainties to the child [7]. This seems to be borne out in practice. Results of a survey of staff views ($n=14$) on the role and benefits of the paediatric radiographer were particularly encouraging. Eight senior radiographers, four nurses, a clinical oncologist and a play-leader completed a simple questionnaire which posed questions about key issues, such as communication between departments, communications between radiographers and other staff, perceived benefits to the child and parents and perceived benefits to the radiotherapy department. Typical responses were:

> 'Communication between parents, children and staff have improved enormously. This has had a beneficial impact in that the radiographers know whom to contact and there is continuity between various stages of treatment'. (Radiographer).
> 'Parents and children seem much better informed about the whole process of treatment and progression through the department. Parents, in particular, feel more in control because they have knowledge and this makes them less stressed'. (Paediatric nurse).
> 'Parents are much more comfortable now dealing with just one person. It helps to stop confusion'. (Play-specialist).
> 'The introduction of the paediatric radiographer has been beneficial and has increased children's confidence'. (Consultant oncologist).

Typical of the parents' views are the following comments:

> 'I like the idea of seeing the same person every day. I can ask questions and know that I can get answers. If he doesn't know the answer, he will find out for me'.
> 'We were anxious and uncertain about bringing our child for treatment but from the first day, when we were met by the paediatric radiographer, we were guided through every part of the treatment and we did not feel alone. He became our friend and ally'.

Whilst there are likely to be a number of benefits for the child and parent with the provision of a paediatric radiographer, there are also significant benefits for the radiotherapy department. Most noticeably there is a reduction in the treatment time

and no necessity for the child to be given sedation, which can cause additional distress for the child and parents on subsequent treatment visits.

Our overall aim is to improve the quality of care and treatment for paediatric patients. To achieve this, the paediatric radiographer needs to provide continuity of care by liaising between wards, radiographers, play-leaders, family, clinicians and the department and to be a provider of information. Whilst parents are well informed about their children's disease and management, and nurses in the children's ward can offer excellent advice about care and chemotherapy, they have little knowledge about radiotherapy and its effects. The paediatric radiographer assumes an important role in this area and the continuity of care remains intact.

CONCLUSION

An important feature of the role of the paediatric radiographer is the need to liaise between the many and diverse professional disciplines involved. Children and parents visiting our department now recognise that they have their own named paediatric radiographer who is there to provide practical and emotional support. This has resulted in greater cooperation from the child, achieving clinically improved accuracy and reproducibility and better quality of treatment overall.

In a busy department the child's cooperation is essential as it allows a smooth passage of treatment, relieving stress on staff and other patients who find it distressing if children are upset. The benefits of designating a post specifically for the purpose of supporting children and their parents have been recognised by radiographers, parents, nurses and clinical oncologists. The role of the paediatric radiographer will be further enhanced by ongoing training and development.

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