

Brief Clinical Report

Sacrificing a Limb for Life: Psychological Interventions in Osteosarcoma

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Psychological management is a crucial part of the overall treatment plan involving therapeutic amputations in children. Therapeutic work aims to facilitate the implementation of a coordinated treatment plan taking into account the patient's physical and psychological needs. Psychological contact at the early stage is advocated to minimize the patient's distress and to forestall potentially handicapping emotional disturbances. The paper highlights important issues at different phases of the patient's treatment, including coming to terms with the initial diagnosis, acceptance of the amputation plan, and the final process of rehabilitation and normal life adjustment. Psychological interventions with one adolescent girl treated with therapeutic amputation for osteosarcoma are used to illustrate the therapeutic process.

Introduction

Therapeutic amputation is often indicated in patients with osteogenic sarcoma as frequently seen during adolescence. The chances of surviving osteosarcoma have been enhanced with early diagnosis and treatment although not without hefty costs to the individuals concerned. Impaired quality of life and psychosocial adjustment remains a taxing clinical concern (Tebbi and Mallon, 1987). Tyc (1992) reviewed the literature and noted that child and adolescent patients were more resilient to the negative effects of amputation. Tyc (1992) noted that many variables which predict maladjustment in children with chronic diseases are also predictive of the adjustment of limb amputated individuals. The documented variables are mostly "state" rather than "trait" variables which are dynamic and potentially modifiable through psychotherapeutic input.

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Goals of psychological intervention

Psychological interventions are designed to enhance the active coping role of individual patients. In the acute phase, the aim is to minimize distress and prevent handicapping emotional disturbances. This approach is closely akin to Lindemann's (1979) "preventive intervention" in health care settings. When anticipatory losses are involved, psychological assistance is called forth in helping patients deal with the arduous tasks required in the mastery of negative emotions, in adopting beneficial coping responses, and in rehearsing feasible future role patterns.

Psychological interventions: overview

While interventions need to be tailored to the individual child patient's and the family's needs, a number of core ingredients are incorporated. Provision of preparatory information, stress inoculation and opportunities for skills acquisition is important in augmenting a sense of control (Meichenbaum, 1985). Maladaptive illness-related thoughts and beliefs are examined so that absolutistic thinking and catastrophizing predictions can be dealt with at an early stage. Reattributions and exploration of more realistic but acceptable alternatives are maximized (Beck, 1976). Social support is mobilized. The aim is to enhance active coping, and to prevent an unhappy, painful situation becoming worse than it necessarily must be. Several principles are emphasized in the intervention process. Early intervention is stressed. Coordination of all parties involved in the illness management is essential. Goals for attainment at different phases of the treatment process should be clearly defined. Dysphoric emotions and negative perceptions are considered focal points for therapeutic inputs. The child is helped to express and deal with dysphoric emotions; and to facilitate the expression and reality testing of catastrophic concerns relating to the loss and trauma so that more acceptable alternatives could be explored. Throughout the process, patient choice and commitment is emphasized. Active coping over that of a frail dependent victim role is emphasized. Parent involvement is an integral part of the program. Parents are coached and helped to rehearse and implement helpful tactics for their child. The aim is to achieve a greater sense of control and order amidst the crisis and chaos. Normalizing and distracting activities are built into the therapeutic program to improve the child patient's inevitably diminished quality of life during the hospital stay, and to minimize the negative consequences of the often intrusive treatment procedures. Efforts are made before and after the amputation to prepare the child patient for dealing with potentially taxing social situations. Tactics for dealing with ridicule, strange looks from others, misconceptions expressed against them or even discriminatory behaviours are discussed. Problem anticipation, definition, and skills for resolution are rehearsed. A balanced perspective in taking the future one step at a time is fostered to prevent the child patient from being overwhelmed by anticipatory worries. Even when the child patient may leave the hospital and is improvised with prostheses, he/she is assured of continual access to the psychologist and the paediatric team. Follow-up sessions are arranged to deal with problems that may arise in daily living. Goals for attainment in personal, social and school functioning are set. The frequency of

follow-up is tailored according to individual circumstances, and is gradually weaned off over time.

Case illustration

To illustrate the process and nature of the psychological interventions, the therapeutic work with an adolescent girl diagnosed with osteosarcoma is described (the long paper available on request discusses one other case in detail).

KC was 10 years old, a P4 student when she was seen. She rejected the treatment plan involving hip disarticulation to be followed by chemotherapy. She also became increasingly depressive with symptoms of social withdrawal, sleep disturbance, decreased appetite, poor morale, loss of interests, and a clearly discernible low mood. She resented the staff, and became almost totally uncommunicative.

Psychological interventions

By way of establishing rapport, the family and personal characteristics of KC were assessed. KC's father was a 43-year-old construction site unskilled worker. Her parents had divorced four years ago, and her mother had since lost contact. As the father had to work full-time, the children were placed under foster care. KC was approached for an assessment of her views and feelings towards her illness. Her perception of the available options and her attitudes towards the medical and nursing staff were elicited. KC was encouraged to express her emotions and to discuss whatever issues she felt like talking about. The open and non-judgmental discussions were instrumental in lessening her perception of the hospital as a sombre, unfamiliar, and coercive place. KC's initial resentment towards the staff also lessened as she found an ally in the psychologist. On the other hand, the ward staff were oriented to see the appropriateness of the emotions (including verbal aggression and resentment) displayed by KC and her father during their crisis period. KC's morale gradually improved as she began to find a more secure place in the ward. The next step involved helping KC and her father to arrive at a decision regarding what was acceptable as treatment for her. A problem-solving approach was adopted. Problems were defined, and possible solutions generated. KC's father was first guided to consider the pros and cons of the suggested therapeutic amputation, and to accept that this was the best option available. KC, on the other hand, was encouraged to talk and fantasize about what would become of her if her leg were amputated. KC admitted that she was pessimistic and scared. She was disturbed by images of herself as a ghost with only one leg if she should die. She was also fearful that she would become unlovable, despised and rejected by others. KC's catastrophic fears about the "inevitable psychosocial consequence" of her amputation were thus uncovered and made available as targets of intervention. Efforts were made to assure KC of the continual acceptance of people important to her to invalidate some of her fears. Her classmates and school teachers were also invited to visit her and rallied support for her. KC finally consented to go through with the operation.

Throughout the subsequent treatment process, KC's morale was bolstered through the consistent availability of the psychologist who served as her support and advo-

cate, and who also provided KC with a much needed sense of security. At a later stage, KC was also taught pain management skills. Her father was seen regularly to deal with his own fears so that he would be more effective in complementing the ongoing psychological treatment. Both KC and her father were provided with their desired level of information on the operation itself (procedural and sensory), and the nature of the rehabilitative efforts that would follow, such as subsequent chemotherapy and use of prostheses. The operation was performed 17 days after KC was first seen. KC succeeded in going through with her subsequent rehabilitation. She returned to her normal school without repeating the year. She remained well, was cheerful and achieving in primary school at six months, one year and two years follow-up. KC did not manifest any behavioural or mood related disorders at follow-up.

Discussion

Adolescence is a period characterized by marked susceptibility to peer influence, a struggle for independence from authority figures, and extensive psychological work devoted to the establishment of a self-identity. Opting to sacrifice one's limb at a time when body image concern is paramount demands enormous psychological effort and commitment. The psychosocial implications of amputation are enormous. As physical deformity and impaired functional abilities are involved, amputation may predispose the patient to feeling oneself as "disabled", not "whole", and an "invalid". The patient's sense of competence may also be put to the most stringent tests. Despite these factors, child and adolescent patients who undergo amputation in the course of their cancer treatment are generally less devastated than once thought, and many have evidenced good functional outcomes in their academic, occupational, and social adjustment. As KC's case illustrated, it is important to tailor psychological inputs to the specific needs of the child patient and her family. Therapeutic efforts are clearly best given at the earliest possible opportunity. Routine pre-amputation psychological assessment of the child patient's resources and adjustment is advocated. An appropriate range and intensity of psychological interventions can then be tailored to maximize therapeutic outcomes and minimize untoward sufferings and emotional disturbances.

References

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Published by Wiley, 1996.

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