Guidelines for the Assessment of Barriers to Rehabilitation of Back Injuries

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Abstract
Not all patients with back pain recover within the expected natural recovery period. Addressing only the physical component and ignoring the psychosocial may lead to treatment failure. Recognition of typical circumstances that may become barriers to rehabilitation enhances the recovery process. Barriers to rehabilitation and questions to help determine their existence are discussed. Asking pertinent questions enables clinicians to identify those who may need re-direction. This re-direction may reduce treatment time, resulting in cost savings for the third party payor and a reduction in health care dollars spent on rehabilitation. Most importantly, resolution of possible barriers and rapid recovery allows the patient to return to a normal lifestyle.

Key Words: barriers; rehabilitation; back pain; recovery.

Introduction

Approximately 90% of all back problems recover spontaneously within 3 months (1-3). The remaining 10% appear to defy conventional medical management, becoming diagnostic challenges for various specialists. Many of the patients who do not recover within the expected natural recovery period have similarities in their circumstances that merit closer examination. Is it possible that recognition of these circumstances would allow clinicians to predict a poor recovery in some patients?

In a recent survey of 25 General Practitioners, by the Canadian Back Institute, each physician believed that he/she could predict which back patients would not recover as expected (4). When asked to explain how they arrived at these predictions, the response was typically "instinct" or "gut feeling", combined with a "relationship with the patient and knowing the circumstances surrounding his/her injury".

Back pain involves both physical and emotional components. Addressing one and not the other may lead to treatment failure. Recognition of typical circumstances that may become barriers to rehabilitation enhances the recovery process. Early recognition of these circumstances may:

a) avoid costly and unnecessary medical investigation,
b) allow for the introduction of new treatment strategies,
c) avoid the frustration of trying to find medical answers for non medical problems, and
d) shift the focus toward altering the circumstances in an effort to prevent the development of barriers.

During a clinical assessment, a typical patient falls into one of two categories, a recognizable pain pattern or a non-mechanical pain pattern. Hall et al. (5) identified five patterns of back pain based not on anatomical location or pathological description, but rather on the clinical picture. Determining a dominant pattern establishes appropriate therapy. Patterns 1 to 4 are recognizable pain patterns. Pattern 5 reflects an abnormal pattern of behaviour and represents a non-mechanical pain pattern. Many patients with recognizable pain patterns move through the rehabilitative process in a consistent and predictable manner. Conversely, most non-mechanical patients have inconsistent yet predictable findings. Non-mechanical pain patients usually have an unsuccessful response to rehabilitation within the natural recovery time frame.

When either type of patient does not make an expected recovery, a clinician must decide if:

a) the slow response indicates a persistent physical cause,
b) the symptoms represent a more sinister pathology, or
c) the symptoms suggest a strong pain focus. With a pain focused patient, there is an unremitting pain focus that makes pain the deciding factor when choosing any activity (5).

Medical investigation of a sinister pathology may include bone scan, blood work, CT scan, and/or MRI. Such tests often have a negative effect on a pain-focussed patient. The investigation will rarely show anything substantial, yet the patient obtains an impression that something is seriously wrong to warrant such tests.

For a patient with a strong pain focus, an inquiry into possible circumstances that may become barriers to rehabilitation may be more important than medical testing. Identifying barriers enables a clinician to become a more effective problem solver and better serve the needs of the patient (6); the patient may require re-direction or consultation with other medical professionals to assist in recovery.

Table 1 indicates pertinent questions for determining the presence of a barrier.

Table I: Determination of a Barrier to Rehabilitation
Circumstances
1. No job available
a) Is there a job to return to?
b) When was the last time you spoke to your employer?
c) Are you planning on returning to your previous job?
d) Does your employer know when you are planning to return?

2. Work motivation
a) Do you like your job?
b) Do you like your fellow workers?
c) Do you like your boss?
d) Does your company treat you well?

3. Physical limitations
a) What are the physical requirements of your job?
b) When do you think you will be able to meet your job requirements?

4. Gradual return to work not acceptable
a) Will your employer accommodate a graduated return to work?
b) Will your employer provide progressive hours, progressive loads, and/or rotating positions?
c) What kind of cooperation is required?
d) Is such a plan acceptable to you?

5. Return to work restrictions
a) Has anyone restricted your lifting or activities to a level below your requirements
b) Has anyone recommended alternative employment?
c) Has anyone restricted you to specific employment?

6. Unrecognized conflict
a) Do you have good relations with your family, employer, third party sponsor and fellow workers?
b) Do you agree with the goals of your rehabilitation?
c) Is there a lawyer involved?
d) Do you need your pain to get your settlement?

7. Secondary gain in the form of money, affection, control and/or escape
a) Is wage replacement sufficient to pay the bills?
b) How long will compensation last?

8. Clinician interference
a) Is the patient's pain sufficient to cancel a return to work?
b) Has a doctor recommended that you delay a return to work until the pain disappears?
b) Will returning to work result in increased harm?
c) How many doctors/specialists have been seen?

Anger, fear or depression characterize many back injuries. However, these signs and the presence of barriers to rehabilitation do not necessarily indicate malingering. Often, a back injury is viewed as the cause of current hardships or unhappiness rather than a contributor (6).

Clinicians have sought a method of identifying patients at risk of developing chronic low back pain. Previous research has helped define the barriers to rehabilitation presented in this paper (6,7). Feuerstein developed the Rochester Model of Work Disability as a tool for identification of potential barriers (8). We agree with the model's thesis that as time away from the workforce due to injury increases, the number of factors contributing

to the work disability also increases (9).

Barriers To Rehabilitation

Is there a job available? The present economy may leave an injured worker with no job. This lack of a clear goal or endpoint to the rehabilitative process can negatively affect a patient's desire for a timely recovery. Job availability must be determined early and monitored constantly throughout the rehabilitative process.

Is there motivation? When a job exists, an injured worker's motivation to return to the same employment must be determined. Poor working conditions, poor labour relations or strained relations with co-workers may negatively influence motivation to return to work. Often, when motivation to go back to the job decreases, the rehabilitation process becomes less effective. The clinician should determine the suitability of employment conditions for the individual injured worker. Consistently ask yourself, "Is the agenda of the rehabilitation process in keeping with the requirements of the patient?"

Is there a physical limitation? A work place that requires function beyond the physical capabilities of the individual will produce pain, frustration and absenteeism. Low back pain is the second largest cause of employee absenteeism (10). A patient who does not have the physical ability to accomplish a repetitive lifting task may not be eager to return to work. The clinician must recognize if a disability exists and/or if the patient can meet the requirements of the job. Helping patients achieve the physical skills to resume their job tasks may eliminate the question of physical limitations as a barrier.

Is a graduated return to work acceptable? An injured worker benefits from any workplace modifications that facilitate an early return to work. Ergonomic and workstyle modification efforts may contribute to an increase in the percentage of patients who successfully return to competitive employment (11). Ergonomic analysis and workplace modifications need the cooperation of the employer and the health care provider. Providing these interventions also improves communication between those involved in the rehabilitation process, which benefits the patient's re-entry into the workforce (12).

Has the clinician imposed return to work restrictions? The practice of placing restrictions on an injured worker may have a negative effect and develop into a new barrier to rehabilitation. Restrictions imply that a patient must not do certain activities. A recommendation outlines the activities a patient can do. Hall et al. (13) found that the probability of a successful return to work increased with a recommendation to return to unrestricted work. The probability of failure increased when restrictions were imposed. Pain was not regarded as a medical reason to give restrictions. The most common reasons given and accepted for restricting a return to work were objective evidence of nerve root irritation, conduction deficit, sciatic scoliosis, consistent and objective reduction in range of motion below job requirements and recognized recent vertebral compression fracture.

Is there unrecognized conflict? Unrecognized or unresolved conflict between the patient and any number of people involved with the injury may present a significant barrier to rehabilitation. A patient's unhappiness with the employer or with a third party sponsor regarding the goals of rehabilitation may prolong recovery. Melles et al. (14) investigated how patients clinicians, doctors and sponsors each defined successful treatment. The authors concluded that there was a statistically significant divergence of opinion in what patients, staff, physicians and sponsors expect from a rehabilitation program. The goals of everyone involved must be identified and the objectives of the rehabilitation process clear to all. Otherwise, conflicting goals concerning the expected outcome may become a barrier.

Litigation
Litigation can also serve to heighten the conflict between the patient and the employer or third party sponsor. Fredrickson et al. (15), in a study of chronic low back pain patients, concluded that litigation was a negative factor in a patient's prognosis. Long (16) claims that our current disability - litigation system adds greatly to the epidemic of low back pain. Patients are often rewarded for non-function. Decisions concerning appropriate treatment are often made by patients, attorneys, employers and judges for reasons based only on their own best interests and experiences. Litigation was shown to negatively affect the rehabilitation process in numerous other studies also (17,18). An essential question to answer is, "Do they need their pain to get the settlement they are seeking?"

Is there secondary gain?

- *Financial*

Patients who believe they are entitled to financial reward because of an accident have little desire to recover quickly. This is especially true today when attorneys have successfully sued for and put a dollar value to pain and suffering. Schoen (19) emphasizes that secondary gain results in a resistance to health that can affect the progression and recovery from illness. Financial supplements for an injury may enable patients to continue their current lifestyles. This often removes the economic incentive to return to work (6). However, secondary gain is not only related to financial benefits, but may include affection, control and escape.

- *Attention*

Families often spend more time with a family member who has incurred an injury. They pay more attention to and empathize more with the injured person in an effort to make him or her feel better. This alteration in family dynamics is a relevant factor in an assessment of post accident symptoms (20). An extended duration of this adjusted family situation can eventually serve to reinforce the injured person's sickness behaviour. The secondary gain, in this situation, is love from a family that is only trying to help.

- *Escape*

A back injury may allow a patient to escape from the everyday pressures and responsibilities of life. The non-injured spouse or other family members often take an increased role in paying the bills and doing household chores in an effort to help the injured person and allow him or her to rest. Should the duration of this escape continue for too long and allow the patient to become too far removed from reality, the family's effort to help only reinforces the negative behaviour.

- *Control*

The increased attention received by an injured person can prompt an image of dependency. This may give a patient a sense of control over family, friends and peers. A patient may become accustomed to a life free of responsibilities, a life only possible when recovery remains not achievable. Thus, by sustaining the impression of helplessness, the patient manipulates the other people in his/her life.

Is there physician interference? A physician must be part of a patient's treatment rather than part of the problem (21). A misinformed or overprotective doctor may prolong the rehabilitation effort unnecessarily. For any patient with recognizable barriers, returning to a normal lifestyle including work is a priority.

Conclusion

Not all patients with back pain recover within the expected natural recovery period. Often a patient appears to defy both diagnosis and treatment. This is usually when investigation of circumstances that may become barriers should start. These barriers to rehabilitation should wave a red flag, alerting the clinician to the possibility of a prolonged recovery. These barriers do not necessarily indicate malingering. Most barriers have the involuntary components of operant conditioning or social learning.

Asking the pertinent questions outlined, enables clinicians to quantify their instincts or predictions, thereby identifying those who may need re-direction to more intensive treatment. This re-direction may reduce treatment time, resulting in cost savings for the sponsor and a reduction in health care dollars spent on rehabilitation. Most importantly, resolution of possible barriers and rapid recovery allows the

patient to return to a normal lifestyle.

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