Spinal Cord (1998) 36, 262–265

http://www.stockton-press.co.uk/sc

Clinical Case of the Month

Spinal injury rehabilitation complicated by psycho-social problems

Avi Ohry[1], Harold Weingarden[1], Jerzy Kiwerski[2], A Otom[3], WS El-Masry[4], Apichana Kovindha[5] and Fin Biering-Sørensen[6]

[1]Department of Neuro-Rehabilitation, Sheba Medical Center, Tel Hashomer, Israel; [2]Rehabilitation Center, Stocer, Konstancin, Poland; [3]Rehabilitation Center, King Hussein Medical Center, Amman, Jordan; [4]Midlands Centre for Spinal Injuries, RJ & AH Orthopedic Hospital, Oswestry, UK; [5]Department of Rehabilitation Medicine, Chiang Mai University, Thailand; [6]Centre for Spinal Cord Injured, Hornbaek, Denmark

Keywords: spinal cord injury; suicide; discharge planning; non-compliance; psycho-social aspects

Introduction

Colleagues from the USA, Poland, Jordan, England, Thailand and Denmark were asked to comment on the admission, care and discharge planning of a patient who became paraplegic following a suicide attempt. This case was further complicated by the fact that the patient was a member of an ethnic minority suffering from severe integration problems.

Case story

The patient was a 31-year-old man who suffered a burst fracture of the L3 vertebra with paraplegia after jumping from a height of three floors. Associated injuries included fractures of the posterior element of C6, the first right zib, bilateral calcaneus and a posterior dislocation of the left elbow. Initial neurologic status was ASIA A-L3. Treatment of the L3 fracture included a posterior spinal fusion between L2 and L4. Past medical history was unremarkable. There were no significant illnesses, medications, or illegal drug use.

Prior to the injury, he had been living with his mother, his girlfriend and his two children. He had immigrated to Israel from Ethiopia 12 years before and had completed his army service after his immigration. He was trained as a house painter, although he subsequently worked in unskilled labor. During the period before his injury, he accumulated debts, became increasingly depressed, left his family and started to drink heavily.

Upon admission to the spinal unit, he was found to be ASIA B with hypesthesia below L3. He progressed normally in the rehabilitation program, including ambulating with bilateral KAFOs and crutches, and was independent in all ADL. He had a mixed-type neurogenic bladder, but had difficulties following an intermittent catheterization management program.

Psychological assessment indicated that while he had had a major depressive episode, he was no longer suicidal. Nevertheless, he wished to withdraw from society and to live alone in a remote region of the country. He did not participate in sports or social activities, nor in the sexual counselling program during his hospitalization.

Difficulties in discharge planning:

1 Lack of accessible housing in the area he wanted to live in (no specific funding agency responsible for providing accessible housing. He had to rely on local government and community services).
2 Lack of family structure and support.
3 Lack of community services for psychological and social support to an individual with paraparesis and a previous suicide attempt.
4 Inability to assure appropriate regular medical follow-up.
5 Dual disability, physical and psychiatric, in a member of an ethnic minority, not yet fully integrated into a westernized culture.
6 Finally, should we admit such patients to the spinal unit, when we have reasons to believe they will not be fully integrated into the mainstream of life?

Response I

H Weingarden, MD
(Formerly Director of Clinical Services, Rehabilitation Institute of Santa Barbara, California, USA)

The management questions generated by this case revolve around the issue of a non-compliant patient, with a recent suicide attempt. The lack of resources reflect the estrangement from his family and the decision not to work. His refusal to learn the

Correspondence: A Ohry

relatively simple management techniques for a partial LMN bladder and to participate in the psycho-social treatment are more recent features of his behavior. Lack of cooperation with the post-discharge follow-up should be anticipated.

With regard to questions 1, 3 and 4: very little can be done if he is adamant in choosing a locale without accessible housing. It is fortunate that he has achieved some ambulatory capabilities. I believe that in the USA, such an individual would be at high risk of living on the streets, and after several episodes of medical complications, would end up in a sheltered care or nursing home facility.

I would make every effort to have the family maintain a unilateral involvement. Even without a normal family structure, they still may serve as the emergency lifeline in times of crisis, and perhaps as a bridge to outside resources should there be a behavioral change.

Questions 5 and 6: being a member of a culturally distinct and disadvantaged minority does add further hurdles to a successful treatment outcome. However, in the USA, if this was a factor in deciding not to proceed with admission to a SCI facility, the doctor and facility would be open to an accusation of racism and to legal action. At the current time in the USA, many of the decisions whether to provide treatment are in the hands of 'case managers', often nurses with no experience in SCI care. This has also provided an opportunity to demand involvement of the insurer or the state in planning for discharge, as a precondition for acceptance into the SCI center.

In summary, I would also have admitted this patient. If, after all efforts of psychiatric and psychological help, social work, and general rehabilitation staff intervention, he still continues to insist on an inappropriate discharge, I would agree, as long as there is no immediate danger. I believe that keeping the family involved and the availability of the SCI unit as a resource are important, especially if there is a change in attitude and an establishment of new life goals.

Response II

J Kiwerski, MD

The negative events in the life of this patient were apparently caused by maladjustment to his new country, by having to take a job below his qualifications and then getting into debt, which finally led to his becoming depressive.

To assess the patient's potential for adjusting to his new living conditions as a disabled person, more information is needed on the exact causes and kind of the depressive episode, on the possible pharmacological anti-depressive treatment following the suicidal jump and its effects, whether psychotherapy was employed, whether there were any attempts to get in touch with his family, the attitude of his relatives toward him and possible family support in the future.

It is quite obvious that the patient's reaction to difficulties is to withdraw and escape. His wish to live alone in a remote region where no medical, psychological or social help is available shows that he is still depressive and neurotic. Apparently, the only way to proceed with comprehensive rehabilitation in this case is to get in contact with his family and by psychological counselling. Further antidepressive treatment seems to be advisable.

Response III

A Otom, MD

This young man has achieved a satisfactory degree of independence through his rehabilitation program. His progress was hampered by his social withdrawal, which might indicate depression. His personality traits, behavioral style and the etiology of his spinal cord injury are guidelines for future care and reflect the importance of an individualized, flexible program.

If this was not done yet, psychiatric assessment with properly administered psychometric data to evaluate treatment approaches and to give an insight into patient potentials could be beneficial. These data will reinforce and recognise the person-environment interaction and provide a basis for scientific approaches to the development of well informed intervention.

Heinman, Schmidt and Semik found that drinking patterns before and after SCI are strongly related and limit rehabilitation gains. This can be related to adjustment problems and hence comes the importance of referral to prevention services.

Since this patient was trained as a house painter, I wonder whether he has in fact worked as a painter and if so, one should think of the possibility of prolonged exposure to volatile substances. One of my patients was found to be addicted to solvent (thinner) and had withdrawal symptoms during hospitalization. This problem goes hand in hand with alcohol drinking.

Finally, when we face an aberrant behavioral problem, we should consider psychogenic disturbances. The Minnesota Multiphasic Personality Inventory-2 (MMPI 2) has been found to be helpful for subtle forms of psychotic behavior.

There are individual differences in the ability to adapt to SCI. Reassessment should clarify the high risk factors which were mentioned. Concrete steps should be taken through an individualized program enlisting family support and providing continuity of care and easy access to care providers. Individual, family and couple therapy are needed to develop better coping skills and increase social support. The family should be trained to enhance the patient's psychosocial environment. Counselling intervention should focus on practical and behavioral aspects of coping and on understanding the individual conceptualization of the situation.

Favorite leisure activities should be assessed to help this individual find personal satisfaction as well as vocational interests after injury, which could possibly change his social withdrawal.

I do agree that it is extremely difficult to deal with such cases, but we have no choice: we need to admit them to the spinal unit because it is the only place where they can receive proper management. I must say that in some of our cases we use every available method of psychological intervention, including religious orientation and spiritual beliefs, which play an important role in accepting rehabilitation interventions.

Response IV

W El-Masry, FRCS

This report highlights the dilemma that is frequently encountered when dealing with patients with psycho-social problems previous to spinal cord injury. There are two questions to answer: first, what do we do with this patient who does not wish to take advice, has not complied with rehabilitation and wants to live in an unsuitable area without family support and without follow-up? Unfortunately there is very little one can do once the patient has been through the teaching and training program and thereafter becomes non compliant. His choice will have to be respected. The other question is whether or not to admit similar patients to a spinal injuries center in the future.

To admit such a patient to a spinal injuries center has obvious implications on precious resources. There is also a risk that failure to modulate this patient's attitude to life in general and to his multiple disabilities in particular could attract criticism that the resource expenditure is not cost-effective. On the other hand, not to admit such a patient is akin to his outright condemnation to a relatively long, miserable life, without giving him a chance to learn how to look after himself as a paraplegic.

My opinion is that all patients have benefited not only from the treatment offered by a specialist center, but also from the intensive training, together with some behavioral modification, which instills in patients the realization of the importance of self-care in a safe environment, the risks of complications and how to prevent them, as well as the importance of regular, lifelong follow-ups.

This training becomes particularly effective when enhanced by the contribution from other patients with similar disabilities. The newly injured patient learns at least as much from the success, failure and the teaching of a well matched experienced patient.

The realization of the importance of self-care and follow-up is sometimes delayed. In some cases this realization does not occur until after discharge and when the patient starts to develop complications. Although in the short term it may seem that this patient has failed to benefit from your center, there is still a possibility he may accept your advice and treatment at some time in the future. Furthermore, the assessment of the potential of these patients prior to admission to a center can be difficult and misleading.

Having treated a number of such patients, I believe it is still worthwhile for the majority of these problematic individuals to be given the chance to benefit from a spinal injuries center.

Response V

A Kovindha, MD

It seems that there is still a chance to improve this patient's functional level to household ambulator, with only AFO and crutches, if he has an intensive physical therapy program. Then he wouldn't need a wheelchair-accessible house and would only use a wheelchair outdoors.

According to his neurological level, like most such patients he could do self-catheterization without difficulty if we encourage him sufficiently.

I will not advise letting him live alone, even though the psychologist confirmed that he has no longer suicidal ideas. Most psychiatric patients after suicidal attempts and after becoming disabled improve, because they receive more attention from the medical personnel and their families. We should approach his family, especially his mother, to accept him and also persuade him to accept his family. Among Asian people, family members are strong supporters of disabled relatives. His mother probably isn't too old yet, still an active person who can support him. I do not think that his girlfriend will stay with him any longer. We have found that such relations often end, but rarely that a wife left her husband after he became disabled. In Thailand, we also see many children (some are only 10 years old) help look after their parents when they become disabled, especially those of low socio-economic background. If at the end, there is really no family support, I would find a proper place which accepts disabled people. In my country, there are homes for the disabled, some belonging to the government and some to NGOs.

In Thailand we also have immigrants from our neighboring countries, many illegal. We try our best to rehabilitate them to their ultimate functional level. Once they become more functional, we may persuade them to learn some sheltered work in order to earn their living. We should give them time and enough psychological support.

People who attempt suicide always think their lives have failed and they are useless. If we understand them, we can help them. We have to be optimistic.

Response VI

F Biering-Sorensen, MD

Spinal cord injury due to suicide attempts has increased during the last decade.[1] This has also been

shown to go hand in hand with unemployment, living alone, previous admissions to psychiatric hospitals and alcohol abuse.[1] Kuhn *et al*.[2] considered suicide attempts to be a 'cry for help'. Unfortunately the situation of the patient often does not change after a spinal cord injury[3]. It is of utmost importance that these individuals receive adequate psychological or psychiatric support during their initial hospitalization, as well as during their follow-up.[2,4]

Regarding the lack of accessible housing in the area, as well as the lack of social support from the local community, one can only hope that direct negotiations with the authorities will help. Otherwise, in the long run, new legislation has to be implemented to make sure that the various community services make these things available in the future.

Regarding lack of family support and lack of psychological support from the local community, it is hard to find a solution. This is probably a question of changing attitudes in society in general. This is a tremendous task faced by everyone working with the disabled.

If spinal cord injured persons cannot be persuaded to get regular medical follow-up, at least we have to inform them that if they develop problems related to their condition they will be welcome at the center. We cannot and should not force anyone to come to us.

Ethnic minorities will probably always find themselves less understood in whatever system they are treated.

The question whether we should admit to spinal units patients who, *a priori*, will not be fully integrated into the mainstream of life is an interesting one. First of all it can be difficult to know in advance. During these last years in different countries we receive increasing numbers of refugees or patients from other parts of the world, for treatment and rehabilitation. It is generally very difficult to find out how to rehabilitate these patients, as many of them will not stay in our social system afterwards. Rehabilitation is in part physical, but also psycho-social, and in particular this rehabilitation cannot be performed in an appropriate way if the staff is not familiar with the society into which the SCI patient is going to be integrated afterwards.

Discussion

Our patient suffers from medical, psychological and social handicaps. Although his rehabilitation program was partially completed, we fear that despite our constant efforts his return to society may not succeed.[5] He has not gained full benefit from his stay at the rehabilitation center and his future is uncertain.

All those consulted agreed that such a patient should be admitted and thus exposed to the benefits of a rehabilitation program. All stressed the importance of trying to enlist the family's active support,[6] while also persuading the patient not to reject his family. All agreed the patient should be reminded that the doors of the rehabilitation center remain forever open to him.[7,8]

These responses reflect the humane, optimistic attitude of those consulted, the essence of which is that everyone is entitled to comprehensive rehabilitation.[9]

Our own experience with SCI after a suicide attempt is not good.[5,10] When feasible, the best solution in our view is psychiatric hospitalization with a parallel day care rehabilitation program. Strong support from society's various services and agencies is mandatory, otherwise such patients end up in chronic institutions. We must do our best, although this may not be enough in such cases.

References

1 Biering-Sorensen F, Pedersen W, Muller PG. Spinal cord injury due to suicide attempts. *Paraplegia* 1992; **30:** 139–144.
2 Kuhn W, Zach GA, Kochlin P, Urwyler A. Comparison of spinal cord injuries in females and males, 1979–1981, Basel. *Paraplegia* 1983; **21:** 154–160.
3 DeVivo MJ *et al*. Cause of death for patients with spinal cord injuries. *Arch Int Med* 1989; **149:** 1761–1766.
4 Hartkopp A, Bronnum-Hansen H, Seidenschnur AM, Biering-Sorensen F. Survival and cause of death after traumatic spinal cord injury in long term epidemiological survey from Denmark. *Spinal Cord* 1997; **35:** 76–85.
5 Gur S, Ohry A, Heim M. Rehabilitation of SCIP with previous psychiatric disorders – fact or fiction? 5th European Regional Conference of 'Rehabilitation International', Dublin, Ireland, May 20–25, 1990.
6 Feigin R, Sherer M, Ohry A. Couples' adjustment to one partner's disability: the relationship between sense of coherence and adjustment. *Soc Sci Med* 1996; **43:** 163–171.
7 Ohry A. Ethical questions in the treatment of spinal cord injured patients. *Paraplegia* 1987; **25:** 293–295.
8 Rosman N, Ohry A, Rozin R. The social status of the treatment of spinal cord injured patients in Israel. *Paraplegia* 1982; **20:** 80–84.
9 Ohry A, Ring H. Rehabilitation medicine in Israel. *Disabil Rehab* 1997; **19:** 382–384.
10 Ohry A, Levy A. Injury proneness: the physiatrist's and psychiatrist's viewpoints. *Harefuah* 1991; **120:** 648–650.