

## Integrated Care For Patients With Spins Injury: An Experience Report From Medical Students

Cuidado Integrado A Paciente Com Lesão Raquimedular: Um Relato De Experiência De Alunos De Medicina

Atención Integrada Al Paciente Con Lesión De Espina: Un Reporte De Experiencia De Estudiantes De Medicina

### RESUMO

Objetivo: Evidenciar a experiência de acadêmicos de medicina diante do acompanhamento domiciliar a paciente com lesão raquimedular durante 6 meses, observar as necessidades, desafios, assistência e convívio social diante do quadro de saúde apresentado, buscar estratégias de intervenções que possam melhorar ou amenizar os problemas de saúde do paciente. Método: trata-se de um relato de experiência descritivo com abordagem qualitativa pautado em visitas domiciliares. Resultados: Por meio dessas visitas, foi possível observar o impacto do tratamento integral e multiprofissional na melhora física, psicológica e social do paciente, como também se observou um regresso generalizado do quadro em momentos os quais parte desse tratamento foi negligenciado. Conclusão: Constata-se a Visita Domiciliar como peça fundamental para fortalecer o vínculo médico-paciente e garantir uma assistência centrada no indivíduo como um todo, procurando satisfazer suas necessidades de forma integrada e descentralizada.

**DESCRIPTORIOS:** Atenção Domiciliar; Qualidade assistencial; Lesão Medular Traumática; Reabilitação; Equipe multidisciplinar

### ABSTRACT

Objective: To demonstrate the experience of medical students in providing home care to patients with spinal cord injuries for 6 months, to observe the needs, challenges, care and social interaction in light of the health condition presented, and to seek intervention strategies that may improve or alleviate the patient's health problems. Method: This is a descriptive experience report with a qualitative approach based on home visits. Results: Through these visits, it was possible to observe the impact of comprehensive and multidisciplinary treatment on the physical, psychological and social improvement of the patient, as well as a generalized regression of the condition at times when part of this treatment was neglected. Conclusion: Home visits are seen as a fundamental element in strengthening the doctor-patient bond and ensuring care focused on the individual as a whole, seeking to meet their needs in an integrated and decentralized manner.

**DESCRIPTORS:** Home Care; Quality of Care; Traumatic Spinal Cord Injury; Rehabilitation; Multidisciplinary Team

### RESUMEN

Objetivo: Evidenciar la experiencia de los estudiantes de medicina en el acompañamiento domiciliario de un paciente con lesión medular durante 6 meses, observar las necesidades, desafíos, asistencia y convivencia social frente al cuadro de salud presentado, y buscar estrategias de intervención que puedan mejorar o aliviar los problemas de salud del paciente. Método: se trata de un relato de experiencia descriptivo con enfoque cualitativo basado en visitas domiciliarias. Resultados: A través de estas visitas, fue posible observar el impacto del tratamiento integral y multiprofesional en la mejora física, psicológica y social del paciente, así como también se observó una regresión generalizada del cuadro en momentos en los que parte de este tratamiento fue descuidado. Conclusión: Se constata que la Visita Domiciliaria es fundamental para fortalecer el vínculo médico-paciente y garantizar una asistencia centrada en el individuo en su totalidad, buscando satisfacer sus necesidades de forma integrada y descentralizada.

**DESCRIPTORIOS:** Atención Domiciliaria; Calidad asistencial; Lesión Medular Traumática; Rehabilitación; Equipo multidisciplinario.

RECEIVED: 06/05/2024 APPROVED: 06/17/2024

**How to cite this article:** Neto AG, Freitas ACB, Simeone D, Filho MC, Corrêa KMM. Integrated Care For Patients With Spins Injury: An Experience Report From Medical Students. Saúde Coletiva (Edição Brasileira) [Internet]. 2025 [acesso ano mês dia];15(92):14048-14051. Disponível em: DOI: 10.36489/saudecoletiva.2025v15i92p14048-14051

**Afrânio Gonçalves Neto**

Medical student at the Afya Faculty of Medical Sciences - Bragança (PA)  
ORCID: <https://orcid.org/0009-0003-7200-0173>

**Analina Costa de Brito Freitas**

Medical student at the Afya Faculty of Medical Sciences - Bragança (PA)  
ORCID: <https://orcid.org/0009-0008-2262-905X>

**Diego Simeone**

Doctor in Environmental Biology, Professor of Scientific Methods in Medicine and Integrated Organic Systems at the Afya Faculty of Medical Sciences – Bragança (PA)  
ORCID: <https://orcid.org/0000-0003-0190-6659>

**Miguel Costa Filho**

Medical student at the Afya Faculty of Medical Sciences - Bragança (PA)  
ORCID: <https://orcid.org/0009-0008-2756-5892>

**Kailany Milena Moreira Corrêa**

Medical student at the Afya Faculty of Medical Sciences - Bragança (PA)  
ORCID: <https://orcid.org/0009-0008-7054-5045>

## INTRODUCTION

Traumatic spinal cord injury is a complex and delicate situation that, in addition to affecting a large part of the locomotor system, is responsible for profoundly affecting the lifestyle of the affected individual. <sup>(1)</sup> It is one of the conditions with the greatest impact on human development and brings consequences that alter both the individual's psychological state and family routine, due to the possibility of disability in daily functions. Brazilian legislation tries to keep up with advances in the world regarding the rights of people with disabilities and, in this sense, has presented important achievements over the last few years. <sup>(2-4)</sup> The right to disability retirement is reserved for those who are unable to carry out work activities after the injury, and are considered by the Social Security medical expert to be incapable of carrying out their activities or other type of service that guarantees their livelihood. <sup>(5)</sup> By identifying that spinal cord injury predominantly affects the young population, of working age, this study aims to monitor a paraplegic patient injured after a work accident and analyze the support and services offered by the Basic Health Unit and the care provided to the patient, as

well as contribute to strengthening this relationship and analyze the role of the doctor and the multidisciplinary team.

## METHOD

This is a report of an experience experienced during home visits to a patient with spinal cord injury resulting from trauma, carried out in the second half of 2023.

The visits took place according to a schedule established by the ACS and family members, with questions regarding the patient's health status, information about the accident, length of hospitalization, medical diagnosis, drug treatment received and received, frequency of visits to the UBS, psychological and social support received, family, social, professional and structural context, since the patient needs a wheelchair to get around.

After compiling the information, intervention strategies were raised in order to reverse the observed problems, such as improving accessibility within the home; psychological support; social support, since the patient was denied social benefits; and improving adherence and the relationship between the patient and the UBS team.

## RESULTS

The patient suffered injuries to the T11-T12 vertebrae in the region that affects the Lumbar Intumescence, which made him paraplegic. He is 44 years old and is unable to work. Upon completion of the examination, the doctor responsible for his examination approved his permanent retirement, but even with the approval, the benefit was suspended. In addition, he and his family members are having difficulty coping with the new lifestyle, since the caregivers are elderly and also have health limitations.

Through home visits, it was observed how devastating the consequences were in the patient's life, leading to serious functional, psychological and social impairments. The trauma presented by the spinal cord injury is a limiting factor and demands a complete change in the patient's behavior and lifestyle and requires a family and multidisciplinary support network that offers comprehensive and continuous support to the patient. <sup>(6)</sup>

During the visit, it was noted that family support was somewhat fragile, limited by the age and health conditions of the caregivers, who are his elderly parents and also require monitoring and care. One of the main complaints reported by the patient was the suspen-

# Experience Report

Neto AG, Freitas ACB, Simeone D, Filho MC, Corrêa KMM

Integrated Care For Patients With Spins Injury: An Experience Report From Medical Students

sion of social benefits, a right guaranteed by Law No. 8,213/1991. With the suspension of wages, there is no way to cover expenses, which generates greater psychological and emotional distress.

Regarding complaints related to his health condition, the patient reported neuropathic pain and neurogenic bladder. According to the Guidelines for Care for People with Spinal Cord Injury<sup>(7)</sup>, the occurrence of pain after spinal cord injury is very common, 60% of cases will have pain at some point in their lives. According to Porto (2015), neuropathic pain is characterized by an uncomfortable sensation that is usually vague in the form of burning, shock or tingling in a region where there is loss or decrease in sensitivity. It is understood as a result of abnormal activation of the nociceptive pathway (small-caliber fibers and spinothalamic tract). Pain can be a disabling factor and has functional, psychological and socioeconomic implications.<sup>(8)</sup>

Physical rehabilitation, through physiotherapy, is a routine of exercises and functional activities that, in addition to bringing physiological benefits inherent to the activity (for example, release of endorphins), can favor not only analgesia, but also the diversion of the patient's focus from their pain, improving the chances of success of the therapies.<sup>(9)</sup> Furthermore, engagement in daily activities favors the experimentation of productive potential, with repercussions on the individual's mood and motivation.

Neurogenic bladder is characterized by bladder dysfunction resulting from changes in the vesico-sphincter control mechanism due to neurological injury, causing inadequate bladder storage and emptying.<sup>(7)</sup> The urological repercussions caused by spinal cord injury are one of the biggest concerns in the rehabilitation process, as bladder malfunction can lead to complications ranging from urinary tract infections, bladder stones to penoscrotal fistulas, vesicoureteral reflux, hydronephrosis and, in

extreme cases, loss of kidney function.<sup>(10)</sup>

Urination involves complex mechanisms of integration of the autonomic (involuntary) and pyramidal (voluntary) nervous systems. The normal micturition cycle should allow urine storage, perception of a full bladder, and voluntary elimination with low bladder pressure<sup>(11)</sup> (TORTORA; DERRICKSON, 2023). For adequate bladder emptying, there must be voluntary relaxation of the sphincter in synchrony with detrusor contraction (involuntary). If relaxation of the external sphincter is not possible and involuntary detrusor contraction occurs, there is an increase in intravesical pressure with a risk of vesicoureteral reflux and long-term renal failure due to post-renal obstruction.<sup>(11)</sup>

Urinary stasis leads to recurrent urinary infections and the risk of urinary stones.<sup>(12)</sup> Management of neurogenic bladder should ensure bladder emptying at low pressure, avoiding urinary stasis and involuntary losses. In most cases, this emptying should be done by intermittent bladder catheterization, instituted as a mandatory procedure, regardless of early urodynamic testing, from the moment of hospital discharge. In addition to the clinical risks (infection and renal failure), urinary incontinence causes social isolation and has a major impact on the patient's functional autonomy. Urinary tract infections are extremely common in spinal cord injury patients and are the main infectious disease that affects them in both the acute and chronic phases of spinal cord injury. The main cause is related to retention and incomplete emptying of the bladder.

Taking these aspects into consideration, it is necessary to periodically assess the urinary tract of spinal cord injured patients throughout their lives. However, the patient stopped catheterization months after the catheter was inserted and, due to incorrect guidance, began using "cups" to urinate. He only

started using the catheter again three months ago, when he developed a urinary infection and sought emergency care.

## DISCUSSION

Still based on the Guidelines for Care for People with Spinal Cord Injury (2015), patients with spinal cord injuries go through behavioral phases, which correspond to: Shock, Denial, Recognition and Adaptation. In the shock phase, there is no notion of the magnitude of the injury and its consequences, and there is a "freezing" of the psychic functions in order to preserve oneself. In the Denial phase, the patient begins to contact reality, however, in a distorted way, and may act passively or aggressively as a way of expressing their anger or nonconformity. In the recognition phase, the patient already sees the paralysis as definitive, which can generate feelings of helplessness and depression. And finally, the Adaptation phase, where the patient sees their rehabilitation as a form of biopsychosocial integration.

In this recognition and in search of better conditions for the rehabilitation process, he sought care at the Sarah Kubitschek Hospital in São Luís do Maranhão, a hospital network dedicated to treating victims of multiple trauma and mobility problems, where he will remain for two months, being monitored by specialists and a multidisciplinary team.

From what we could see, the lack of structure, family support and financial problems accentuate the health problem caused by the spinal cord injury, because, even though the patient has difficulty moving, he has repeatedly reported interrupting treatments and follow-up with medical, psychological and physiotherapist appointments due to the difficulty in getting to the place of care. Psychological monitoring should be integrated into the multidisciplinary team, aiming at biopsychosocial rehabilitation. However, the patient has evaded

treatment, considering psychotherapy unnecessary. As a result of non-adherence, the recognition and adaptation phases become more difficult and emotionally painful.

There are many barriers experienced by a patient with paralysis and adaptations in the environment are necessary to minimize barriers and facilitate safe movement, both in domestic and community environments. As a way to guarantee access, the patient arranged for a ramp to be built so that he could enter and leave his home.

## CONCLUSION

Monitoring through home visits al-

lowed us to conclude that there is a need for a comprehensive and continuous care network for patients with spinal cord injuries. Patients with spinal cord injuries are monitored by primary care professionals and referred to specialized centers, such as physiotherapy centers, to minimize injury-related damage, a process coordinated by the Basic Health Unit. The experiences reported by the patient suggest that quality of life after spinal cord injury is strongly associated with the quality of the multidisciplinary approach, the integration between professionals, the therapeutic, psychological, family and social support that he receives. It was observed that there is a lack of greater integration among the

health team that monitors him, since there is no psychotherapeutic monitoring and the physiotherapy is being carried out in the private network, paid for by friends. When listening to the patient, it is possible to understand all the phases experienced after the injury. The brain requires time to understand that life goes on, but that, for this to happen, it needs adaptations, changes and, above all, support. The association between motor losses resulting from the injury and architectural barriers further reduces the mobility possibilities of the individual with spinal cord injury and makes social reintegration and coping with the new condition more difficult.

## REFERENCES

1. Cruz LG, Machado CS, Afiúne FG. Os aspectos emocionais do lesado medular frente ao seu diagnóstico. *Revista Científica da Escola Estadual de Saúde Pública de Goiás "Cândido Santiago"*. 2021; 7: e700004.
2. Brasil. Constituição (1988). *Constituição da República Federativa do Brasil*. Brasília, DF: Senado Federal; 1988.
3. Brasil. Decreto n.º 3.298, de 20 de dezembro de 1999. Regulamenta a Lei n.º 7.853, de 24 de outubro de 1989, dispõe sobre a Política Nacional para a Integração da Pessoa Portadora de Deficiência, consolida as normas de proteção, e dá outras providências. *Diário Oficial da União* 28 abr 1999;
4. Brasil. Lei n.º 13.146, de 6 de julho de 2015. Institui a Lei Brasileira de Inclusão da Pessoa com Deficiência (Estatuto da Pessoa com Deficiência). *Diário Oficial da União* 7 jul 2015;
5. Brasil. Lei n.º 8.213, de 24 de julho de 1991. Dispõe sobre os Planos de Benefícios da Previdência Social e dá outras providências. Brasília, DF: *Diário Oficial da União*, 1991.
6. Murta SG, Guimarães SS. Enfrentamento à Lesão medular traumática. *Estudos de Psicologia (Natal)*, 2007;12(1):57-63.
7. Brasil. Ministério da Saúde. Departamento de Ações Programáticas Estratégicas: Diretrizes de Atenção à Pessoa com Lesão Medular, 2015.
8. Porto CC, Porto AL. *Clínica Médica na Prática Diária*. 2. ed. São Paulo: Grupo GEN, 2015.
9. Moreira DO. Fisioterapia: uma ciência baseada em evidências. *Fisioterapia em Movimento*, 2017;30(1):9
10. Brasil. Ministério da Saúde. Secretaria de Ciência, Tecnologia e Insumos Estratégicos, CONITEC. *Cateter hidrofílico para cateterismo vesical intermitente em indivíduos com lesão medular e bexiga neurogênica. Relatório de Recomendações*, 2019.
11. Tortora GJ, Derrickson B. *Princípios de Anatomia e Fisiologia*. (16ª edição). Grupo GEN; 2023.
12. Heilberg IP, Schor N. Abordagem diagnóstica e terapêutica na infecção do trato urinário: ITU. *Revista da Associação Médica Brasileira*, 2003;49(1):109–116.