Function & Disability Journal
2025, Volume 8

Case Report

Return to Work After Bell's Palsy: A Case Study Based on an Occupational Therapy View

Behnoush Ghadery[1], **Zahra Hassani**[2*]

1. Department of Physical Education and Sports Sciences, SR.C., Islamic Azad University, Tehran, Iran.
2. Department of Occupational Therapy, School of Rehabilitation, Tehran University of Medical Sciences, Tehran, Iran.

Article info:
Received: 10 Jul 2025
Accepted: 23 Aug 2025
Available Online: 10 Sep 2025

ABSTRACT

Background and Objectives: Bell's palsy (BP) refers to a sudden paralysis of the facial nerve (CN VII) on one side of the face. It affects function and quality of life. The present study aimed to investigate a comprehensive treatment in a patient with BP, with a special focus on returning to work.

Case Presentation: The case study patient was a 28-year-old female who was working as an engineer. After she was diagnosed with right-sided BP, she lost her job and developed symptoms of depression. The goals were to restore facial sensory-motor functions, facilitate the patient's return to work (RTW), and alleviate depression. Comprehensive interventions, including sensory and motor programs, return-to-work programs, cognitive work hardening, and counseling, were performed in this regard.

Conclusion: Following 36 sessions of training, as assessed by the House-Brackmann facial nerve grading system, the patient achieved normal facial function and returned to work.

Keywords: Bell's palsy (BP), Return to work (RTW), Occupational therapy

Use your device to scan and read the article online

Cite this article as Ghadery B, Hassani Z. Return to Work After Bell›s Palsy: A Case Study Based on an Occupational Therapy View. Function and Disability Journal. 2025; 8:E314. http://dx.doi.org/10.32598/fdj.8.160.314

http://dx.doi.org/10.32598/fdj.8.160.314

*** Corresponding Author:**
Zahra Hassani
Address: *Department of Occupational Therapy, School of Rehabilitation, Tehran University of Medical Sciences, Tehran, Iran.*
Tel: *+98 (021) 22142405*
E-mail: *zhassani.ot@gmail.com*

Function & Disability Journal

What is "already known" in this topic:

BP refers to facial nerve paralysis with both physical and psychological effects. It may hinder the RTW. Occupational therapy and cognitive work hardening have been used to support recovery and work reintegration.

What this article adds:

This case study shows that a holistic occupational therapy program, including cognitive work hardening and counseling, can restore facial function and support RTW in BP patients.

Introduction

Bell's palsy (BP) is a sudden paralysis of the facial nerve (CN VII) on one side of the face, which causes a loss of strength in the platysma and muscles that control facial expression. The weakness can be complete or partial and may be accompanied by numbness, mild pain, increased sensitivity to sound, and alterations in taste. The cause of this condition is unknown [1].

There is no gender difference in the incidence of BP, although the number of affected females is slightly higher [2]. According to reports, the incidence of facial paralysis is 25 cases per year for every 100000 individuals in the population [3]. Therefore, this situation requires special attention.

Facial paralysis may elicit a range of emotional responses in patients. Patients may experience a sense of facial dysmorphia, resulting in a perception that their facial features lack a natural quality, thereby impeding the expression of emotions and hindering communication abilities. These difficulties may contribute to feelings of social isolation and societal incomprehension. According to research, individuals coping with facial paralysis exhibit a higher probability of experiencing anxiety and depression compared to the general population [4]. These conditions harm an individual's ability to return to work (RTW). Accordingly, in addition to physical aspects, psychological issues should be considered in the treatment plan. The cognitive work hardening (CWH) program can play a crucial role in the rehabilitation of patients with BP, particularly those experiencing psychological distress or reduced work capacity. By addressing cognitive, emotional, and work-related challenges, CWH helps improve concentration, coping skills, and readiness to RTW, thereby supporting overall recovery and functional reintegration [5, 6]. Occupational therapists with their holistic knowledge consider all the physical, mental, psychological, and social aspects of the patient and plan a comprehensive intervention for RTW and other daily life activities [7]. Thus, the present study aims to evaluate a comprehensive treatment in a patient with BP, with a special focus on RTW.

Case Presentation

Case was a 28-year-old single woman who lived with her family in Tehran City, Iran. She was working as an engineer in a company. After a sudden stress, she received the diagnosis of right-sided BP. Thus, she underwent drug therapy and was immediately referred to the rehabilitation clinic. Therefore, a comprehensive evaluation of occupational therapy, based on observation and interview and using the House-Brackmann facial nerve grading system tool, was performed at the beginning of the diagnosis. Evaluation consisted of assessing her resting facial posture and active movements. The patient showed symptoms of paralysis on the right side of the face, numbness, ear pain, and watery eyes. It was difficult for her to make various facial expressions with her mouth, including smiling, showing her teeth, and looking angry. However, she could drink, eat, and talk normally with her tongue in place. Nonetheless, she was unable to close her right eye completely, so she put tape on it before going to bed. Initially, she received a score of 5 based on the House-Brackmann facial nerve grading system, indicating severe dysfunction, asymmetry at rest, and only barely perceptible motion.

The House-Brackmann facial nerve grading system is a clinical scale used to evaluate facial nerve function based on the observation of facial movements at rest and during voluntary actions (e.g. eye closure and smiling). It includes six grades/ grade I indicates normal function, while Grade VI represents total paralysis. The assessment considers symmetry, range of movement, muscle

tone, and synkinesis [8]. It was also determined in the comprehensive evaluation of the occupational therapist after the onset of BP that case lost her job and demonstrated signs of isolation and depression. The patient's anxiety and self-confidence levels were assessed based on self-report and during a structured interview.

Management and rehabilitation

Following the initial assessment, a 3-day-per-week treatment program was recommended for the client, with each session lasting approximately 90 minutes. The initial interventions included the use of IR, ice, massage, aromatherapy, mirror therapy, kinesio taping, strengthening and stretching exercises, and counseling by the rehabilitation team [9-12]. Each session, the interventions were selected according to the therapist's evaluation. However, the patient's chief complaint was returning to work, so the CWH program was chosen for her. The CWH intervention was provided by an occupational therapist qualified for this role, given that the intervention's underlying principles are the cornerstones of the occupational therapy profession. The patient's work environment, occupational functioning, and work demands were thoroughly assessed in this program. In addition to the mentioned techniques to increase facial radiance, counseling and coaching sessions were conducted to enhance self-confidence, develop coping skills, simulate work, and strengthen cognitive skills [13]. The occupational therapist also equipped the client with strategies such as positive self-talk, cognitive reframing, and pacing to help with her anxiety. In addition, other client activities were reported to the occupational therapist to integrate all activities for RTW based on the occupational therapist's holistic view [14].

Discussion

This case report was designed to use CWH and physical rehabilitation techniques to facilitate RTW in patients with BP. After completing 36 sessions over a 3-month period, the client had completely regained facial symmetry and scored a 1 on the House-Brackmann facial nerve grading system, indicating normal facial function in all areas. Moreover, according to the patient's report, her stress level had decreased, her self-confidence had increased, and thus she had returned to her work environment. Expanded self-confidence and sentiments of self-efficacy regularly follow, which encourage development from a "patient identity" to a "worker identity" and appear to be a basic factor in RTW success. This holistic approach, which addresses physical, psychological, and occupational needs, aligns with the biopsychosocial model of rehabilitation and emphasizes the importance of a comprehensive treatment plan for BP recovery [15].

Conclusion

This case study highlights the effectiveness of a comprehensive occupational therapy program, incorporating CWH and physical rehabilitation, in facilitating full recovery and successful RTW after BP. Addressing both physical and psychological factors is essential for holistic rehabilitation and sustainable occupational reintegration.

Ethical Considerations

Compliance with ethical guidelines

The patient was fully informed about the purpose and procedures of the rehabilitation program and provided written informed consent before participation. The confidentiality and privacy of the patient's personal and medical information were strictly maintained throughout the study. All interventions were conducted in accordance with ethical standards and guidelines of the rehabilitation clinic. The patient had the right to withdraw from the treatment at any time without any consequences.

Funding

This research did not receive any grant from funding agencies in the public, commercial, or non-profit sectors.

Authors' contributions

Conceptualization, methodology, project administration, resources data curation, investigation, formal analysis, validation, visualization, review, and editing: and supervision: Behnoush Ghadery and Zahra Hassani; Funding acquisition: Behnoush Ghadery; Software: Zahra Hassani; Writing the original draft: Zahra Hassani.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgments

The authors would like to thank the participant for her cooperation in this study.

Function & Disability Journal

References

[1] Singh A, Deshmukh P. Bell's palsy: A review. Cureus. 2022; 14(10):e30186. [DOI:10.7759/cureus.30186]

[2] Zandian A, Osiro S, Hudson R, Ali IM, Matusz P, Tubbs SR, et al. The neurologist's dilemma: A comprehensive clinical review of Bell's palsy, with emphasis on current management trends. Med Sci Monit. 2014; 20:83-90. [DOI:10.12659/MSM.889876] [PMID]

[3] Albakri K, Khaity A, Atwan H, Saleh O, Al-Hajali M, Cadri S, et al. Bell's palsy and COVID-19 vaccines: A systematic review and meta-analysis. Vaccines (Basel). 2023; 11(2):236. [PMID]

[4] Vargo M, Ding P, Sacco M, Duggal R, Genther DJ, Ciolek PJ, et al. The psychological and psychosocial effects of facial paralysis: A review. J Plast Reconstr Aesthet Surg. 2023; 83:423-30. [DOI:10.1016/j.bjps.2023.05.027] [PMID]

[5] Kendrick D, Dhiman P, Kellezi B, Coupland C, Whitehead J, Beckett K, et al. Psychological morbidity and return to work after injury: Multicentre cohort study. Br J Gen Pract. 2017; 67(661):e555-64. [DOI:10.3399/bjgp17X691673] [PMID]

[6] Sun Y, Shigaki CL, Armer JM. Return to work among breast cancer survivors: A literature review. Support Care Cancer. 2017; 25(3):709-18. [DOI:10.1007/s00520-016-3446-1] [PMID]

[7] Désiron HA, de Rijk A, Van Hoof E, Donceel P. Occupational therapy and return to work: A systematic literature review. BMC Public Health. 2011; 11:615. [DOI:10.1186/1471-2458-11-615] [PMID]

[8] Kang TS, Vrabec JT, Giddings N, Terris DJ. Facial nerve grading systems (1985-2002): Beyond the House-Brackmann scale. Otol Neurotol. 2002; 23(5):767-71. [DOI:10.1097/00129492-200209000-00026] [PMID]

[9] Alptekin DÖ. Acupuncture and Kinesio Taping for the acute management of Bell's palsy: A case report. Complement Ther Med. 2017; 35:1-5. [DOI:10.1016/j.ctim.2017.08.013] [PMID]

[10] Quinn R, Cramp F. The efficacy of electrotherapy for Bell's palsy: A systematic review. Phys Ther Rev. 2003; 8(3):151-64. [DOI:10.1179/108331903225002470]

[11] Vaughan A, Gardner D, Miles A, Copley A, Wenke R, Coulson S. A systematic review of physical rehabilitation of facial palsy. Front Neurol. 2020; 11:222. [DOI:10.3389/fneur.2020.00222] [PMID]

[12] Paolucci T, Cardarola A, Colonnelli P, Ferracuti G, Gonnella R, Murgia M, et al. Give me a kiss! An integrative rehabilitative training program with motor imagery and mirror therapy for recovery of facial palsy. Eur J Phys Rehabil Med. 2020; 56(1):58-67. [DOI:10.23736/S1973-9087.19.05757-5]

[13] Wisenthal A, Krupa T, Kirsh B, Lysaght R. Insights into cognitive work hardening for return-to-work following depression: Qualitative findings from an intervention study. Work. 2019; 62(4):599-613. [DOI:10.3233/WOR-192893] [PMID]

[14] Wisenthal A. Case report: Cognitive work hardening for return-to-work following depression. Front Psychiatry. 2021; 12:608496. [DOI:10.3389/fpsyt.2021.608496] [PMID]

[15] Button P. New developments in the international:Union: For the protection of new varieties of plants (UPOV). Acta Hortic. 2006; 714:195-210. [DOI:10.17660/ActaHortic.2006.714.22]