

Attachment Style and Pain Perception in Burn Injury: A Case Report

Anisah Adianti^{1,2}, Azimatul Karimah^{1,2} and Ira Handriani^{3,4}

Anxious Attachment and Burn Pain Perception

ABSTRACT

Burn pain is strongly influenced not only by tissue injury but also by psychological factors. We report the case of a 55-year-old man admitted with partial-thickness electrical burns involving approximately three percent total body surface area. Although the physical injury was limited, he reported severe and persistent pain accompanied by marked anxiety about disability and burdening his family. Psychiatric consultation was requested. His developmental history and current coping pattern were consistent with an anxious attachment style, which appeared to amplify pain perception and catastrophic thinking. He was diagnosed with adjustment disorder with anxiety related to burn injury and received supportive psychotherapy, cognitive-behavioral interventions, and FRAMES-based counseling alongside standard burn care. As anxiety decreased, his reported pain intensity also improved. This case underlines the importance of considering attachment style and psychological distress in burn pain management and supports the role of early psychiatric involvement in multidisciplinary burn care.

Key Words: Burns; Electric Injuries; Pain Perception; Attachment Behavior; Anxiety Disorders; Adaptation, Psychological

Citation of Case Report: Adianti A, Karimah A, Handriani I. Attachment Style and Pain Perception in Burn Injury: A Case Report. *Med Forum* 2026;37(4):101-102. doi:10.60110/medforum.370420.

INTRODUCTION

Burn pain is a complex clinical problem shaped not only by tissue injury but also by emotional and cognitive responses. Psychological factors, including attachment style, influence how individuals interpret and cope with stress, illness, and pain.¹ Attachment style reflects relational patterns formed early in life and carried into adulthood, and has been linked to differences in distress tolerance and threat perception. Individuals with insecure attachment, particularly anxious attachment, may experience greater worry and amplified pain perception when faced with medical trauma.² Recognizing this relationship may help clinicians provide more holistic care for burn patients.

This case report describes a burn patient with anxious attachment style whose pain perception and anxiety improved following targeted psychological interventions.

CASE REPORT

A 55-year-old married man who worked intermittently as a construction laborer and farmer was admitted to the burn unit after accidental electrocution while repairing the ceiling of his home. He sustained partial-thickness second-degree burns involving about three percent of the total body surface area, affecting the left hand and both feet. Although initially shocked by the incident, he expressed a strong desire to recover quickly so he could return to work, as he was the main financial provider for his family and continued to support a school-aged child. On admission he reported severe pain rated 8 out of 10, which worsened during dressing changes and debridement and improved only temporarily with intravenous analgesia. Over time he became increasingly worried that the pain would be permanent, that he would no longer be able to work, and that he would become a burden to his wife. These concerns contributed to sleep disturbance and significant anxiety. He denied previous psychiatric illness and described himself as disciplined and emotionally reserved. He recalled a childhood marked by inconsistent caregiving, with a strict father and a permissive mother who nevertheless reported his misbehavior to his father, which led him to suppress emotions to avoid conflict. On examination he was alert and hemodynamically stable, with normal neurological and laboratory findings. The burns were confirmed as partial-thickness electrical injuries involving approximately three percent total body surface area. Because the intensity of reported pain appeared disproportionate to the physical

¹ Department of Psychiatry, Dr Soetomo General Academic Hospital, Surabaya, Indonesia

² Department of Psychiatry, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia

³ Department of Plastic Surgery, Dr Soetomo General Academic Hospital, Surabaya, Indonesia

⁴ Department of Plastic Surgery, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia

Correspondence: Azimatul Karimah, Department of Psychiatry, Dr Soetomo General Academic Hospital, Department of Psychiatry, Faculty of Medicine, Universitas Airlangga, Jl. Mayjen. Prof. Dr. Moestopo 47, Surabaya, East Java, 60286, Indonesia.

Contact No: +62-31-5914042/ Fax +62-31-5915551

Email: azimatul.karimah@fk.unair.ac.id

Received: December, 2025

Reviewed: January-February, 2026

Accepted: March, 2026

severity of the burns, the burn team requested a psychiatric consultation.

Psychiatric assessment revealed marked anxiety focused on pain, disability, and financial responsibility, accompanied by a tendency toward catastrophizing and concerns about dependency on others. His presentation and developmental history were consistent with an anxious attachment style that appeared to heighten pain perception and emotional distress. He was diagnosed with adjustment disorder with anxiety related to burn injury. The patient continued to receive standard burn care and underwent five debridement procedures under general anesthesia, with medical pain management and rehabilitation therapy to prevent contractures. Psychiatric treatment included supportive psychotherapy, FRAMES-based counseling to encourage adaptive coping, and cognitive behavioral techniques to address catastrophic beliefs and attachment-related fears. Clobazam 5 mg nightly was prescribed to support anxiety relief and sleep. With coordinated multidisciplinary care, his anxiety gradually improved, and reported pain intensity decreased from 8 out of 10 to about 3 out of 10. By the time of discharge, he expressed greater confidence in recovery and increased willingness to communicate his emotional needs to both his family and the treatment team.

DISCUSSION

Pain in burn injury reflects not only tissue damage but also psychological and emotional processing.¹ In some patients, reported pain intensity may exceed what would be expected from the physical injury alone. Anxiety, catastrophic thinking, and relational insecurity can heighten attention to pain and lower tolerance.^{2,3} In this case, the patient experienced severe and persistent pain despite relatively limited burn involvement. His worries about disability, loss of income, and burdening his family appeared to amplify the subjective pain experience. Attachment theory provides a useful lens for understanding this pattern. Individuals with anxious attachment often struggle with insecurity, high threat sensitivity, and a strong need for reassurance in stressful situations. Early caregiving inconsistency can impair emotional regulation, making acute illness particularly distressing.⁴ For this patient, longstanding tendencies to internalize emotion and avoid conflict contributed to heightened anxiety when hospitalized, which in turn intensified pain perception.

Psychological intervention played an important role alongside medical care.⁵ Supportive psychotherapy and cognitive behavioral techniques helped the patient explore and reframe catastrophic fears, while the FRAMES approach encouraged active coping. As emotional distress improved, his reported pain intensity declined. This reinforces the value of integrating psychological care into burn management, particularly for patients with insecure attachment or significant worry. Although this is a single case, it highlights how attachment style may influence the pain experience in burn injury. Early psychiatric consultation can support

pain control, improve coping, and prevent prolonged distress. Future research may clarify how screening and targeted intervention could strengthen multidisciplinary burn care.

CONCLUSION

This case illustrates how psychological factors, particularly attachment style, can influence the perception of pain in burn injury. In this patient, an anxious attachment pattern contributed to heightened worry, catastrophic thinking, and amplification of pain despite relatively limited tissue damage. When psychological distress was identified and addressed through supportive and cognitive-behavioral approaches, both anxiety and reported pain intensity improved. These findings stress the value of early psychiatric consultation and multidisciplinary collaboration in burn care. Awareness of attachment related vulnerability may help clinicians provide more holistic treatment, strengthen coping, and reduce the risk of prolonged distress in patients recovering from burn trauma.

Conflict of Interest: The study has no conflict of interest to declare by any author.

Source of Funding: None

Ethical Considerations and Consent: Informed consent for publication of clinical details was obtained from the patient and her family. All efforts were made to protect patient confidentiality and anonymity throughout the reporting process.

Authors Contributions: All authors were involved in the clinical care of the patient, contributed to the preparation of the manuscript, and approved the final version.

REFERENCES

1. Jeschke MG, van Baar ME, Choudhry MA, Chung KK, Gibran NS, Logsetty S. Burn injury. *Nat Rev Dis Primers* 2020;6(1):11.
2. Nyland JE, Escolás HD, Archuleta D, Aden JK, Escolás SM. Attachment Style and Burn Pain. *J Burn Care Res* 2022;43(6):1386-1393.
3. Duchin ER, Moore M, Carrougher GJ, Min EK, Gordon DB, Stewart BT, et al. Burn patients' pain experiences and perceptions. *Burns* 2021; 47(7):1627-1634.
4. Domic-Siede M, Guzmán-González M, Sánchez-Corzo A, Álvarez X, Araya V, Espinoza C, et al. Emotion regulation unveiled through the categorical lens of attachment. *BMC Psychol* 2024; 12(1):240.
5. Shokre ES, Mohammed SEM, Elhapashy HMM, Elsharkawy NB, Ramadan OME, Abdelaziz EM. The effectiveness of the psychosocial empowerment program in early adjustment among adult burn survivors. *BMC Nurs* 2024;23(1):45.