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Dead Butt Syndrome (Gluteal Amnesia) : A Case Study

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Abstract

Gluteal amnesia, another name for Dead Butt Syndrome (DBS), is a disorder marked by dysfunction of the gluteus medius, which results in discomfort, weakness, and changes in biomechanics. The symptoms, diagnosis, and physiotherapy treatments of a 35-year-old office worker with acute Dead Butt Syndrome are described in this case report. The instance highlights posture correction, neuromuscular re-education, and strengthening as rehabilitation techniques.

Introduction

Dead Butt Syndrome (DBS), also known as gluteal amnesia, is a condition where the gluteus medius muscle becomes weak or inactive, leading to postural instability, lower back pain, as well as hip troubles [1] Long periods of sitting, inactivity, and muscular imbalances are the main causes of the syndrome. These factors lead to impaired neuromuscular activation of the glutes and an overrecruitment of compensatory muscles such the hip flexors and lower back extensors [2].

DBS has become a prevalent problem among office workers, athletes, and those with bad posture as a result of modern lifestyles that are growing more sedentary [3]. In addition to impairing gait mechanics and spinal alignment, improper gluteal activation raises the likelihood of ailments such as knee soreness, lower back strain, and hip bursitis [4].

Preventing and treating DBS requires early diagnosis and focused therapies, such as mobility drills, posture adjustments, and glute-strengthening exercises [5]. Developing successful treatment plans to restore ideal muscle function and movement efficiency requires an understanding of the underlying causes and risk factors.

Methodology

This case study, which focused on a 35-year-old man with long-term sitting habits, used a single-subject design. The following were part of the methodology:

Participant Selection: The patient was chosen as a participant because of their clinical presentation, history of extended sitting, and favourable DBS diagnostic markers.

Assessment Tools:

- Manual Muscle Testing (MMT) to evaluate gluteus medius strength.
- Trendelenburg test to assess pelvic stability.
- Visual gait analysis to identify compensatory movements.
- Patient-reported outcome measures, including the Visual Analog Scale (VAS) for pain and Oswestry Disability Index (ODI) for functional limitations.

Intervention Protocol:

- Activation, strengthening, and functional rehabilitation were the three stages of a 12-week organised physical therapy program.
- Subjective pain ratings, functional evaluations, and strength tests were used to monitor progress.
- Twice-weekly supervised sessions with suggested at-home workouts.

Data Analysis

Strength, pain reduction, and functional ability were evaluated by comparing pre- and post-intervention assessments.

For continuous variables, paired t-tests were used to assess statistical significance.

Case presentation

A 35-year-old male office worker complained of unilateral hip weakness and discomfort on the right side, which got worse after jogging and sitting for extended periods of time. The patient complained of periodic lower back pain and trouble staying stable when walking. The discomfort had persisted for three months and there was no history of trauma.

- **Observation:** Slight pelvic tilt and asymmetry in hip musculature.
- **Palpation:** Tenderness over the gluteus medius and minimus.
- **Strength Testing:** Weakness in right hip abduction (Manual Muscle Testing Grade: 3/5).
- **Functional Tests:** Positive Trendelenburg sign, altered gait pattern, and poor single-leg balance.
- **Imaging:** MRI ruled out structural pathology, confirming gluteal dysfunction.

Diagnosis

Due to insufficient gluteal activation and extended sitting, the patient was diagnosed with acute Dead Butt Syndrome (Gluteal Amnesia).

Physiotherapy Management

1. **Phase 1: Activation and Neuromuscular Re-education**
    - Gluteal isometric contractions
    - Supine bridge exercises with biofeedback
    - Side-lying clamshells with theraband resistance
    - Postural correction education

2. **Phase 2: Strengthening and Functional Rehabilitation**
    - Squats and lunges focusing on gluteal engagement
    - Hip abduction exercises using resistance bands
    - Single-leg stance training for proprioception
    - Core stabilization exercises (planks, dead bugs)

3. **Phase 3: Return to Activity and Prevention**
    - Progressive return to running with gait analysis
    - Dynamic warm-up routine emphasizing hip activation
    - Ergonomic adjustments for prolonged sitting (standing desk, lumbar support)
    - Patient education on movement breaks and active sitting

Outcome and Follow-Up

The patient's discomfort and function significantly improved after eight weeks of organised therapy. The patient returned to jogging pain-free, the Trendelenburg sign disappeared, and strength tests increased to 4+/5. A 12-week follow-up revealed sustained improvement with no symptom return.

Discussion

DBS is frequently disregarded in sedentary people, which, if left addressed, can result in long-term musculoskeletal problems. Recovery requires physiotherapy treatments that emphasise mobility retraining, strength training, and activation (Jones & Brown, 2020). According to a research by Anderson et al. (2022), focused gluteal activation exercises are crucial for helping DBS patients feel less discomfort and perform better.

Conclusion

The significance of early detection and focused rehabilitation in cases with acute Dead Butt Syndrome is demonstrated by this example. Gluteal function is successfully restored and recurrence is avoided using a systematic physiotherapy approach.

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