A Case Study

Contents

Background

Exercising is an excellent strategy for maintaining one's wellness. It maintains one intellectually and emotionally balanced and also physically fit. There are numerous forms of exercise based on one's physiological needs and comfort level; regardless of the type of workout chosen, it is critical to take specific precautions to avoid workout ailments (Anarte-Lazo et al., 2022). Each injury, major or moderate, is distressing and can put an individual back on track. Whereas the reasons for workout injuries vary, each injury must receive prompt attention and treatment to prevent the problem from worsening (Al-Khazali et al., 2020).

This paper focuses on the case of Jax Teller, a 16-year-old dancer who was injured while doing reps during squats. This case study is unique since many individuals fall sick due to a lack of exercise. On the other hand, Jax became a patient even when he was active and working out to stay fit.

Health History and Clinical Manifestations

Jax was an otherwise healthy individual before the incident of frequent reps. He has been an active individual and a dancer. Six months ago, he got a neck injury (whiplash) when performing frequent reps with his friend. He felt a minor snapping sensation in the back, on the right side of the neck. There was burning pain at the base of his skull (right side) down into his upper trap near his scapula. He was overworked and did not feel the pain (Osterland et al., 2019). He was feeling dizzy and uneasy. He was ignorant of his symptoms and considered them a consequence of excessive pushing. He now has chronic moderate neck pain, difficulty rotating his head, quick neck movement, tightness in his neck, a headache, and a sharp pulling pain radiating from the

right side of his neck. These issues contributed to difficulty concentrating, stress, and unfulfilled feelings (Anarte-Lazo et al., 2022).

Assessment

The intricacies of the whiplash diagnostic process can be convoluted and have traditionally been a source of debate. During the physical assessment, Jax's posture, range of movement, and physical condition will be assessed. The movements that cause pain will be noted. The pain score was moderate, i.e., 7/10. The healthcare professional will feel his spine for its alignment and curvature. Jax's shoulder area will be checked. For neurological assessment, his pain spreads, and all nerve changes, muscle strength, and reflexes will be assessed. An X-ray needs to be done to discover other spinal issues. A CT scan and MRI can also assess soft tissues (Stenneberg et al., 2021).

Goal and Treatment Plan

The potential goal and treatment plan for Jax include maintaining a stance of functions as illustrated by the dearth of contractures; increasing strength of uninjured or compensatory parts of the body; demonstrating behaviours or techniques that enable reinstatement of activity; identifying behaviours to recompense for deficits; verbalise understanding of sensory needs and the ability for deprivation or overload; reporting relief or regulation of pain; identifying ways to manage pain, and illustrating the utility of relaxation abilities and diversional actions; verbalise understanding of disease, outcome, and therapy; express feelings; perform required operations accurately and explain why they are performed on them; make necessary lifestyle modifications and follow the treatment plan (Al-Khazali et al., 2020). Massage therapy is also indicated as an

alternative and supplemental therapy addressing neck injuries. It may be the earliest and major primitive method of pain relief (Osterland et al., 2019).

Treatment and Home Care

Healthcare providers must make it feasible for Jax to call for assistance (specifically sensitive calls). It gives the patient a feeling of control and decreases the anxiety of being alone. Plan the activities so that they have plenty of time to recuperate. It encourages participation within one's tolerance and capability. Seek to prevent weariness, allowing Jax to put out their best efforts and actively engage. Make sure he is ready for weight-bearing exercises. Encourage people to utilise relaxing methods. It relieves muscle tension, weariness, and pain associated with muscle spasticity and spasm (Osterland et al., 2019).

Jax should be referred to occupational and physical therapists, massage therapists, and the rehabilitation team. It aids in developing and implementing tailored exercise programmes, as well as identifying and developing assistive devices to retain function, independence, and mobility. Encourage him to keep exercising and conditioning regularly to avoid weariness and aches. Administer pain medicine as prescribed. Painkillers such as ibuprofen can be prescribed for pain relief (Anarte-Lazo et al., 2022). Emphasize the importance of working with the rehabilitation team to attain particular functional objectives and to keep track of therapy requirements over time. Examine the layout of the home and make any required alterations. Determine the medical supply and equipment requirements as well as available resources. Encourage the patient, recognise and build on their abilities, and praise them for their accomplishments. As needed, seek counselling and psychotherapy. Assist Jax in identifying the triggers (Ludvigsson et al., 2020).

Follow-up and Outcomes

Whiplash recovery occurs primarily in the first two to three months following the incident. After that, rehabilitation slows significantly, and after two years, complaints have not improved. 20-70 percent of patients who suffered a neck injury in a vehicle accident are still in agony six months later. The patient may demonstrate slight relief in pain, movement, headache, or other complaints (Silva Guerrero et al., 2020). In further follow-up meetings, Jax can show signs of complete improvement with no pain and can easily dance or exercise without any difficulty. He may be doing all the exercises regularly. If Jax returns with no change or worsening of complaints, a dose adjustment may be indicated. However, if Jax does not return, it can be assumed that Jax may not comply with the medication and not be following the exercise schedule. It may indicate that Jax's complaints may have been aggravated or worsened (Tanaka et al., 2018).

Strengths and Limitations

These approaches may help correct a condition, enhance musculoskeletal performance, or keep a person healthy. It can range from highly targeted activities that target specific muscles and areas of the body to more general and strenuous activities that help to recover patients regain their physical fitness (Ludvigsson et al., 2020). Adapting to frequent physical exercise causes less perturbation to the cells' internal factors and reduces tiredness, resulting in improved energy and performance efficiency throughout everyday physical activity. However, stress has a lot of psychological reasons in common, which can make it challenging to deal with everyday tasks (Osterland et al., 2019).

Conclusion

There is significant evidence that passivity correlates to the development of chronic disease and that physical activity, on the other hand, can prevent illness and slow the progression of the current disease. For that purpose, "exercise as medication" has been promoted in the broad sense as primary medical care and in the trivial sense as a therapy, to be treated similarly to other pharmaceuticals. Exercise as a therapy, on the other hand, is relatively undeveloped and, in practice, is not treated the same way as pharmacologically based treatments. The implication of this case study can be helpful in future research to find more treatment options for neck injuries. They can establish, reinforce, or diminish historical interpretations of an instance, and in some cases, they can allow for theoretical (rather than numerical) generalisation beyond the specific cases analysed.

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