
Anxiety among the Patient with Lumber Disc Prolapse:

A Case Report

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Anxiety is an internalized fear aroused by an impulse .It is a painful emotional experience produced by excitations in the in the internal organs of the body. It is the form of fear not based on the present situation, but also upon the actual or imaginative experience of the past, present, and future. The symptoms of anxiety are common in the community and typically persist for many years and are also associated with personal disorders.¹

There are various types of anxieties but we mainly focused on two types of anxieties with respect to our case and these are:

1. STATE ANXIETY:
2. TRAIT ANXIETY:

STATE ANXIETY:

It is an emotional state or condition characterised by the consciously perceived feeling of tension and apprehension. This may vary from the time to time.

TRAIT ANXIETY:

Trait anxiety refers to the relatively stable individual differences between people in the tendency to respond to the situation that are perceived as threatening with elevations. It refers to the required behavioural disposition^{2,3}.

LUMBER DISC PROLAPSE:-

The term prolapsed disc means the protrusion or extrusion of the nucleus. It is not a onetime phenomenon rather it is a sequence of change in the disc which ultimately leads to its prolapse. It is a spinal condition that can cause lower back pain as well as numbness, tightness of pins and

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needles, feeling of muscle weakness in the lower body. This is also referred to as a herniated or ruptured disc and is usually caused by normal age related deterioration ^{4,5}.

CASE REPORT

In present case study we examined the middle aged female patient who was suffering from lumbar disc prolapse from last five years. It was observed that the patient has developed the anxiety due to this chronic illness. So in order to measure the anxiety level of the patient we used the state and trait anxiety scale. This scale consists of 60 items, 30 of trait anxiety and 30 of state anxiety. There are no right and wrong responses in this scale. Methodology involved providing instructions to the patient about this scale and making the patient mark the responses on the form containing 60 items and then it was scored. We found that the patient scored high on both traits and state anxiety which shows that the patient's anxiety level is very high.

DISCUSSION

PHYSIOLOGICAL BASE OF ANXIETY:-

Anxiety is a psychological, physiological, and behavioural state induced in animal and humans by a threat to wellbeing or survival either actual or potential. It is characterized by increased arousal and expectancy autonomic and neuroendocrine activation of specific behavioural patterns. The function of these changes is to facilitate coping with an adverse or unexpected situation ¹⁰. Anxiety is a unique and coherent cognitive, affective, structure within our defensive and motivated system, at the heart of this structure is absence of uncontrolabiling focused largely on possible negative events in contrast with fear where danger is present and eminent. ¹¹ Thierry steamer in his study reported that neurotransmitters such as dopamine and serotonin cause varieties of mental tensions which makes person feel anxious. He further reported in his study that amygdala and cingulate pre-frontal lobe and cortex are also involved in anxiety disorders ¹⁰. The emotional processes to fear and anxiety that have been most extensively studied have involved pavlovian fear conditioning and fear potentiated startlen.^{12,13} .These types of "fear learning" have been shown to comprise experience dependent forms of neural plasticity in an extended anatomic network that centers around the critical involvement of amygdale ^{14, 15}.The structures that function in concert with the amygdala during fear learning include other mesotemporal cortical structures , the sensory thalamus and cortices, the orbital and medial prefrontal cortex, the anterior insula, the hypothalamus and multiple brainstem neculei.^{14,13,16}.

PSYCHOLOGICAL BASE OF ANXIETY:-

The psychological symptoms are more common in women than in men. The indications of uneasiness are a mental state described by over the top and steady state described by over the top and steady stress pressure and anxiety. Many of the signs of anxiety are the same issues we would experience if we had a serious health problem. It can cause chest pain, dizziness, vertigo caused by nothing more than being a bit hungry to be of no concern, loss of appetite, lack of interest in sex, muscles attacks, headaches, insomnia, frequent panic attacks etc. The person is also at increased risk of diabetes, high blood pressure, heart diseases, rise of coronary events etc.

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These symptoms may begin immediately or year later. Anxiety is normal reaction to stressful situations. But in some case it becomes excessive and can cause suffering for every day situation. But in some cases it becomes excessive and can cause suffering for everyday situation. It is frequently co-occurring with depression, exaggerated worries and expectations of negatives outcomes in unknown situation²².

PHYSIOLOGICAL BASE OF LUMBER DISC PROLAPSE:-

Lumbar disc prolapse is a common condition that frequently affects the spine in young and middle-aged patients^{17, 18, 19}. The lumbar intervertebral disc is a complex structure composed of collagen, proteoglycans, and sparse fibrochondrocytic cells that serve to dissipate forces exerted on the spine. As part of the normal aging process, the disc fibrochondrocytes can undergo senescence, and proteoglycan production diminishes. This leads to a loss of hydration and disc collapse, which increases strain on the fibers of the annulus fibrosis surrounding the disc. Tears and fissures in the annulus can result, facilitating a herniation of disc material, should sufficient forces be placed on the disc. Alternatively, a large biomechanical force placed on a healthy, normal disc may lead to extrusion of disc material in the setting of catastrophic failure of the annular fibers¹⁷. Regardless of etiology; herniations represent protrusions of disc material beyond the confines of the annular lining and into the spinal canal. Back pain may occur due to disc protrusions that do not enter the canal or compromise nerve roots¹⁷. The more treatable condition of lumbar radiculopathy, however, arises when extruded disc material contacts, or exerts pressure, on the thecal sac or lumbar nerve roots^{17, 18}. The pain associated with lumbar radiculopathy occurs due to a combination of nerve root ischemia and inflammation resulting from local pressure and neurochemical inflammatory factors present within the disc material^{18, 20, 21, 19}. Lumbar disc herniations exist on a continuum of degenerative spinal processes that include intervertebral disc degeneration and lumbar spondylitis¹⁸.

PSYCHOLOGICAL BASE OF LUMBER DISC PROLAPSE:

Thoughts of the pain as influenced by previous experience, knowledge and motivated effective emotional response like anger, anxiety and fear which motivate the response to pain and all this contribute to the complexity of painful experiences⁶. Pain and fear are the emotional response to the pain experiences which is threatening. Such as one that leads to pain sensation^{7, 8}. Future avoidance of painful activity is often the resulting behaviour adopted to protect oneself from repeat of these painful experiences⁹. Substantial amount of research has explored the possible relation between depressive disorders and chronic pain.²³

CONCLUSION

From the above case study we concluded that it is important to have the knowledge of psychological aspect of chronic ailments as the same is important for holistic treatment of an individual suffering from chronic ailments. The knowledge of psychological aspect of the patient suffering from chronic Lumbar disc prolapse is important for physiotherapist, orthopedic an and

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neurosergon, as these patients usually develop the anxiety disorder. Therefore psychological counselling is utmost required for overall cure and treatment of these patients.

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