



Neuroboriellosis and Associated Myoclonus in a Patient with Kartegener's Syndrome

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ABSTRACT:

In the current time cardiopulmonary disorders are the most common cause of death and disability among which atelectasis has now become an advanced disease in Pakistan and all over the world. Atelectasis is a condition in which one or more areas of your lungs collapse or don't inflate properly which is appeared with high morbidity and mortality. There appears to be no published data on Peak flow meter exercises and effects of Peak flow meter exercises on atelectasis in Pakistan or in the world. The purpose of this study is the advancement and role of Peak flow meter exercises after atelectasis. To determine the effectiveness of Peak flow meter exercises on atelectasis. cardiopulmonary diseases are the most common cause of death and disability among which atelectasis has now become an advanced disease in Pakistan and all over the world. Furthermore according to international studies respiratory problems are most leading cause of death and loss of lung volume is noted routinely after atelectasis. Furthermore, atelectasis appears with high morbidity and mortality after surgery involving sternotomy which occurs approximately 7.4 cases-18 cases per one lac population per annually in men and 1.2 cases-6 cases per one lac population per annually in women's. As we know that atelectasis is very advanced but a major procedure so it may give rise to multiple complications, some of them are discussed as above. There are different factors which interfere with normal respiratory mechanics due to atelectasis i.e. pain due to sternotomy and air presence in the pleural space which leads to guarded breathing, increased mucus production and decreased mucociliary clearance are some of the important causes which affect the gas exchange and promote hypoxia, hypercapnia and tachypnea . In these circumstances, if the patient also develops decrease lung compliance due to air in the lung then it may lead to increase pleural pressure and comprises lung expansion causing further.

A total of 56 patients were selected post atelectasis with a complaint of absent or decreased air entry in lung bases. All the patients were selected by non-probability convenient sampling and distributed randomly into control and experimental groups. A well-designed questionnaire was used for the collection of data. The

assessment before and after Peak flow meter exercises was done and different variables (auscultation scale, arterial blood gases and dyspnea Borg's scale) were noted. General physical therapy protocol was given to all patients but Peak flow meter exercises were added for the experimental group. General physical therapy protocol (mobilization, static walk, breathing exercises and in bed activity) given to both the groups were the same but active peak flow meter exercises were performed only by the experimental group. Different tools were used in this study like auscultation scale of the chest, Arterial Blood Gases (ABGs) and dyspnea Borg's scale.

Results: Different variables were analyzed and the experimental group shows highly significant in the improvement of lung sound and x-ray. It was also noted that the Borg's Dyspnea scale and auscultation scale , partial pressure of carbon dioxide all found highly significant in the experimental group, but the PO₂ and SO₂ was not found significant. These findings suggest that Peak flow meter exercises are effective to improve lung expansion in atelectasis patients. The improvement of the experimental group was early as compare to the control group. The potential for administration of technique was safe and proved to be very effective for the improvement of atelectasis. Then general Physical therapy treatment was given to both the groups i.e. control group and experimental group, but 2 hourly 20 active peak flow meter exercises were performed by each patient in the experimental group. The patients in the experimental group were instructed to inhale as much air as they can and then exhale the air through peak flow meter slowly which gives a positive pressure on the lungs to improve the lung compliance and to improve the Arterial Blood Gasses (ABGs) and also to improve the lung volumes and capacities.

The mean age of the experimental and control group years respectively. Patients gender consists 39 male (Experimental 20, Control 19) and 17 females (Experimental 09, Control , 18 smokers (8 experimental, 10 control group) 21 with diabetes (09 experimental, 12 control group) as per Pulmonary function scale, on the first day mean was noted 4.00 ± 0 for both experimental and control group but on the third-day post- chest tubes mean for experimental group (1.00) and control group (1.43 ± 0.504) highly significant which shows the

marked difference regarding improvement of pulmonary function test in experimental group.

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