

Case Report

A Case Report on Bronchial Asthma with Myopathy

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Abstract

Muscle disease is referred to as myopathy. As a result, the muscles are less efficient than they might be. When muscles don't grow correctly, are injured, or are missing vital components, this might happen. Muscle atrophy is common in patients who have had Bronchial Asthma with Myopathy for a long time. Muscles lose mass and strength as a result of this fading away. We recently treated a patient who was experiencing some of the same issues. We suggested a Brain MRI and total spine screening to the patient which indicated hypoplasticity in the left transverse sinus. An X-Ray of the chest indicated that the left inferior nasal turbinate had

expanded. Traditional therapies like acupuncture and massage, as well as modern techniques like multipurpose equipment and physiotherapy, were chosen to treat our patients. Our patient had wonderful success with these strategies. The procedure for the patient's treatment has been completed. At the end of the 12th day of chest treatment, the patient was completely free of breathlessness. On the 10th day of acupuncture, the patient's low back discomfort began to improve. At the end of the 20th day of therapy, the patient's headache begins to improve. Moreover, the authors believe that it is the first successful reported case in Bangladesh using these techniques.

Keywords: Bronchial Asthma; Myopathy; Tongue and body acupuncture; physiotherapy; Manipulation; Multifunctional equipment; Chinese medicine therapy

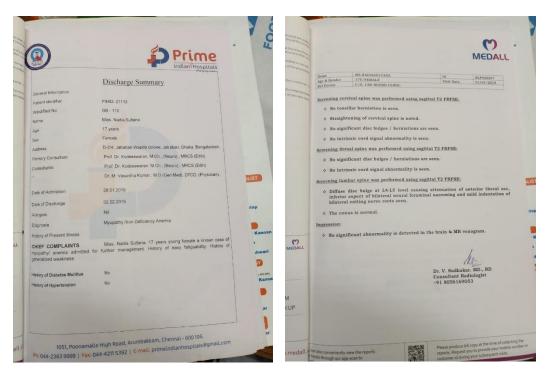
1. Introduction

There have only been 15 recorded cases of acute weakness during treatment of asthmaticus, which is uncommon [1-6]. In most cases, the weakening is mild to severe and widespread, occasionally affecting the breathing muscles as well. Previous studies using EMG and muscle biopsies have suggested that this condition is myopathic in origin. The reason is unknown, however, it is possible that large doses of intravenous (IV) corticosteroids, typically in conjunction with other types of concurrent medication, such as pancuronium bromide and vecuroniuni, had a significant impact [7-10].

In order to better understand the characteristics and causes of this disease, we have observed this patient.

2. Case Report

Myopathy was identified in a 21-year-old woman from Narayangani, Bangladesh, who was taken to the hospital with Bronchial Asthma and a 15-year history of lower-limb weakness and trouble walking. The CT scan shows no abnormalities in the brain's structure. The SELEON gene has a homozygous probable pathogenic mutation. An autosomal recessive SELEON-related disease was found to be the cause of the symptoms. Chronic myopathy without denervation at the level of Gastrocnemius, Right S1, 2 is found in the NCS and EMG results. Myopathy is discovered by an investigation of the conduction of motor nerve impulses. CBC, DLC CRP (hs-CRP), lactic acid, and Vitamin B12 levels were all within normal ranges. Diabetic complications were ruled out in this patient. Maxillary sinusitis in both sides has been seen on an X-ray center PNS (Paranasal Sinuses) with O/M view. The left inferior nasal turbinate has become enlarged. A brain MRI with venography and whole spine screening revealed hypoplasticity of the left transverse sinus. The liver's USG results are normal.



Picture I: Patients diagnosis report

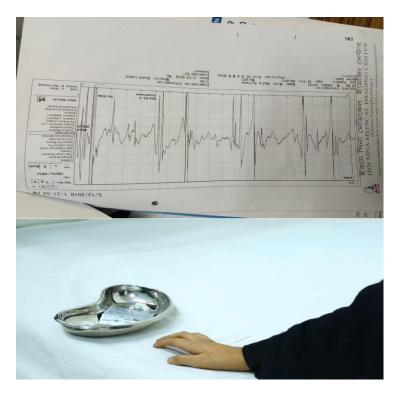
Picture II: Patients diagnosis report



Picture III: MRI of whole spine screening showing the left inferior nasal turbinate has become enlarged.



Picture IV: Giving Tongue and body acupuncture to the patient.



Picture V: Giving Tongue and body acupuncture to the patient.

There are few natural therapies that are as effective as tongue acupuncture (TA). According to traditional Chinese

medicine theory, several tongue acupoints correspond to specific bodily functioning areas. TA is said to be able to affect the flow of blood and energy in the body by stimulating distinct meridians connected with different organ's functioning. Low-voltage electric currents are used in TENS treatment to alleviate pain through the skin's sensory and motor nerves. The electricity is delivered to the nerves through a tiny device. TENS treatment alters your experience of pain by blocking or reducing its intensity. For the treatment of acute or chronic pain, infrared radiation therapy, or light therapy, is used in physiotherapy. Various light wavelengths are targeted on injured areas of the body in this treatment. In addition to relieving pain and improving flexibility, mobilization is a slower method used on joints, ligaments, or muscles. Repetitive motions may be hard or soft depending on the severity of the problem being treated, which makes it more time-consuming than traditional manipulation. The difference between the two approaches of exercise therapy is the degree of patient mobility. Passive exercise doesn't need much effort from the patient since they don't have to move their muscles. A physiotherapist may employ ultrasound, acupuncture, and electric current, heat, or cold on muscles as part of passive exercises. While passive physiotherapy activities do not need the use of muscles and joints, active physiotherapy exercises do? The patient attempts to move his joints or the damaged part of his body on his own. In the treatment of neuro-musculoskeletal disorders, manipulative physiotherapy is an area of expertise. A patient's biopsychosocial framework and scientific and clinical evidence drive this approach. A hollow candle is inserted into the ear canal and the other end is lit to produce negative pressure. This method is used to remove earwax and other debris from the ear canal. The procedure is complete. At the end of the 12th day of chest treatment, the patient was completely free of breathlessness. On the tenth day of acupuncture, my low back discomfort began to improve. At the 20th day of therapy, the pain subsides. There are few

natural therapies that are as effective as tongue acupuncture (TA). According to traditional Chinese medicine theory, several tongue acupoints correspond to specific bodily functioning areas. The patient attempts to move his joints or the damaged part of his body on his own. In the treatment of neuro-musculoskeletal disorders, manipulative physiotherapy is an area of expertise. A patient's biopsychosocial framework and scientific and clinical evidence drive this approach. A hollow candle is inserted into the ear canal and the other end is lit to produce negative pressure. This method is used to remove earwax and other debris from the ear canal.

3. Discussion

Since the first documented case of acute myopathy in severe asthmatic patients was reported in 1977, the condition has become more common [11]. It was hypothesized that the patient we described had bronchial asthma and paralysis in both lower limbs, as well as low back pain; a headache; and dyspnea. Routine blood examinations are investigated first. There were no surprises in the reports. The SELEON gene has a homozygous probable pathogenic mutation. An autosomal recessive SELEON-related disease was found to be the cause of the symptoms [12]. Chronic myopathy without denervation at the level of Gastrocnemius, Right S1, 2 is found in the NCS and EMG results. Myopathy is discovered by an investigation of the conduction of motor nerve impulses. Maxillary sinusitis in both ears has been seen on an X-ray center PNS (PARANASAL SINUSES) with an O/M view. The left inferior nasal turbinate has become enlarged. A brain MRI with venography and whole spine screening revealed hypoplasticity of the left transverse sinus. After that, we decided to use Acupuncture to help the patient: Therapists use TENS and IRR, as well as a variety of other techniques, to treat the tongue, body, the muscles and joints.

The procedure is complete. At the end of the 12th day of chest treatment, the patient was completely free of breathlessness. On the tenth day of acupuncture, my low back discomfort began to improve. At the end of the 20th day of therapy, the patient's headache begins to improve. This is the first time that acupuncture, physiotherapy, and Chinese medicine treatment have been used to treat myopathy successfully.

4. Conclusion and Recommendations

During therapy for asthmaticus, acute myopathy and neuropathy may ensue. Despite the fact that the procedure may be reversed, the mortality rate is high. Acupuncture, massage, physiotherapy, manipulation, and multipurpose equipment were all used successfully in this case. If feasible, we concur that long-term use of high-dose IV corticosteroids and paralytic drugs should be avoided if at all possible.

References

- Bachmann P, Gaussorgues P, Piperno D, et al. Acute myopathy after status asthmaticus. Pressemedicale 16 (1983): 1486.
- Shee CD. Risk factors for hydrocortisone myopathy in acute severe asthma. Respiratory Medicine 84 (1990): 229-233.
- 3. Danon MJ, Carpenter S. Myopathy with thick filament (myosin) loss following prolonged paralysis with vecuronium during steroid treatment. Muscle & Nerve 14 (1991): 1131-1139.

- 4. Hoad NA. Steroid-induced myopathy. Respiratory Medicine 84 (1990): 510-511
- 5. Knox AJ, Mascie-Taylor BH, Muers MF. Acute hydrocortisone myopathy in acute severe asthma. Thorax 41 (1986): 411-412.
- Lacomis D, Samuels MA. Adverse neurologic effects of glucocorticosteroids. Journal of General Internal Medicine 6 (1991): 367-377.
- 7. MacFarlane IA, Rosenthal FD. Severe myopathy after status asthmaticus. Lancet 2 (1977): 615.
- Sitwell LD, Weinshenker BG, Monpetit V, et al. Complete ophthalmoplegia as a complication of acute corticosteroid- and pancuronium-associated myopathy. Neurology 41 (1991): 921-922.
- Van Marle W, Woods KL. Acute hydrocortisone myopathy. British Medical Journal 281 (1980): 271-272.
- Williams TJ, O'Hehir RE, Czarny D, et al. Acute myopathy in severe acute asthma treated with intravenously administered corticosteroids. The American Review of Respiratory Disease 137 (1988): 460-463.
- Griffin D, Fairman N, Coursin D, et al. Acute myopathy during treatment of status asthmaticus with corticosteroids and steroidal muscle relaxants. Chest 102 (1992): 510-514.
- 12. Blackie JD, Gibson P, Murree-Allen K, et al. Acute myopathy in status asthmaticus. Clinical and Experimental Neurology 30 (1993): 72-81.



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