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A Case-Report Highlighting Effects of PMF and Camel Milk on a Multiple Sclerosis Patient

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1. Abstract

1.1. Background: PMF is proved to be highly selective agent for many types of cancer in tissue culture levels and in the animal model.

1.2. Case: This case highlighted the tremendous improvement experience in patient with Multiple Sclerosis treated when conventional treatments were combined with PMF capsules and Camel milk drink.

1.3. Discussion: Our case demonstrated improvement in the management of Multiple sclerosis using PMF capsule with intermittent drinking of camel Milk.

1.4. Conclusion: We therefore conclude from what is observed and suggest possible link between PMF and camel milk drink in this patient's tremendous improvement from MS.

2. Introduction

Multiple sclerosis (MS) is a chronic autoimmune, inflammatory neurological disease of the central nervous system (CNS) [1,2]. The disease attacks the myelinated axons in the CNS, destroying the myelin and the axons to varying degrees [3,4]. The course of MS is highly varied and unpredictable. In most patients, the disease is characterized initially by episodes of reversible neurological deficits, which is often followed by progressive neurological deterioration over time. In 2019 GBD estimation of world prevalence for 2016 was 2221 188 of MS which corresponds to 30.1 % per 100000 population (95% IU 2033 866-2436858) [5]. From 250,000 to 350,000 patients in the U.S. have MS, 5 and 50% of patients will need help walking within 15 years after the onset of the disease [6]. Twice as many women are affected as men, and persons of Northern European descent appear to be at highest risk for MS [2,7]. The disease is diagnosed on the basis of clinical findings and supporting evidence from ancillary tests, such as magnetic resonance imaging (MRI) of the brain and examination of the cerebrospinal fluid (CSF). Multiple sclerosis typically presents in adults 20 to 45 years of age; occasionally, it presents in childhood or late middle age [7]. The cause is unknown, but it appears to involve a combination of genetic susceptibility and a nongenetic trigger, such as a virus, metabolism, or environmental factors, that together result in a self-sustaining autoimmune disorder that leads to recurrent immune attacks on the CNS [7-9].

There is no single diagnostic test for MS [2]. The diagnosis is based on evidence of (1) at least two different lesions (plaques

or scars) in the white matter of the CNS (the space dissemination criterion); (2) at least two different episodes in the disease course (the time dissemination criterion); and (3) chronic inflammation of the CNS, as determined by analysis of the CSF (the inflammatory criterion). Also, there is no specific cure for MS.

Treatment is usually directed to accelerating recovery during attacks and slowing down further retrogression and symptomatic relief.

PMF is a new pharmaceutical drug prepared by alcoholic extracting of camel urine and was proven to have selective toxicity and anticancer substrates [9]. PMF is a new effective anticancer drug PMF is proved to be highly selective agent for many types of cancer in tissue culture levels and in the animal model as well [10-12]. It has been tested on healthy volunteers and passed the clinical trial phase I successively [13]. The effects that PMF may have on MS is therefore reported in this case study. This report will highlight the patient experience from the commencement of PMF capsules (500mg/day) used with drink of Camel milk.

3. Case Presentation, Management and Follow-Up Report

A 24-year-old Arab woman from Kuwait was diagnosed with MS in the age of 19 had a conventional treatment for MS and suffered relapse many times for 5 years. Symptoms before using PMF capsules (500mg/day) included the following:

• Balance: There was an imbalance and a lack of control on walking straight drifting to the right side while walking.

• Vision: Had a blurry vision and sometimes she could not even focus on anything.

• Tingling and numbness: She suffered from tingling and numbness, especially in the feet and legs and this even sometimes reaches to the lower half of the body.

• The general fatigue and movement: There were a lot of tiredness, a sense of dizziness, pain in head and shoulders. She was not able to move much, unable to sit or walk in crowded places as She felt suffocated and could not stand for a long period of time.

• Physical activity: It was impossible for her to exercise or walk, because of fatigue, numbness in the whole body.

Symptoms After using the PMF capsules were as listed below:

• Balance: After a short period of using PMF capsules (500mg/day), improvement was observed in balance. With the long term of PMF capsules usage (500mg/day), she was improving in her balance skill. An improvement of 90% was seen comparing with previous balance skill.

• Vision: After a short period of using PMF capsules (500mg/day) , an improvement in vision was observed. On the long term of using PMF capsules, all sorts of suffering from focusing on objects and blurry vision troubles had disappeared and her level of concentration had improved significantly.

• The general fatigue and movement: After a short period of using PMF capsules (500mg/day) limbs numbness was decreased, but on the long term, there was an improvement, in terms of that tingling feeling and numbness comes only with extreme tiredness and when going for a long walk that reaches nearly an hour. However, having a short rest for 5 to 15 minutes was enough to clear this type of tiredness feeling.

• Physical activity: There were good improvements in fatigue status, pain in head and shoulders, and the sense of dizziness. Patient reported she was able to move well and to visit closed and crowded areas without any suffocation or fatigue feelings.

4. Management and Follow-Up

This case has been managed initially with MS treatment protocol and monitored Series of MRIs reports. She was placed on PMF, a capsule per a day (500mg/day) with intermittent drinking of camel's milk. May 2014 was the beginning of PMF usage of capsulated extracted and camel milk, in a rate of one capsule per a day (500mg/day) with drinking camel's milk intermittently.

Summary of the series of MRI before May 2014, shows that the patient has both cranial and spinal cord lesions. In the brain, lesions are predominantly in both cerebral hemispheres including corpus callosum, and right cerebellar peduncle while in the spinal cord, they are in the cervical region spanning the upper 5 cervical vertebral bodies.

Except for the test done on 26/6/2013, all the tests were compared to the penultimate ones. There was a new lesion in the left centrum semi ovale in 2010 when compared to 2009 report in keeping with disease progression. Patient exhibited stable disease between 2010 and 2012. However, between December 2012 and July 2014, there were evidence of disease progression in brain; new lesions were found in the medulla oblongata and high parietal subcortical white matter. The spinal cord lesions were stable.

Observations after the commencement of PMF: There was a significant turn of event in January 2015. Some lesions got smaller in size in both the brain and spinal cord when compared to images of July 2014, which implied improvement in the appearance of the disease. May 2014 was the beginning of PMF usage. Since that time up till March 2018, the disease has shown stable picture. This period represents remarkable achievement as it was the first time there was radiological improvement in the disease, and the longest period of stability.

5. Discussion

We report a case of 24-year-old female MS patient who had conventional treatments for MS and suffered relapse from time to time for 5 years, and then got symptoms improvement with combined treatment with PMF one capsule per a day with intermittent drinking of camel's urine. The aim of this study is to explore various

PMF Nanoparticles structure and their mechanism of action that can be hypothesized to support reason(s) for this patient improvement.

It was observed that the patient scan shown improvement after the commencement of both PMF and camel milk drink. Properties of both urine and milk of the camel have been well researched and the improvement seen might be related. The one-humped camel (Camelus dromedaries) For desert dwellers in Asia and Africa, the camel continues to be vital to daily life as a source of food and just as importantly, its milk and urine have been used as medicines for diverse ailments since ancient times [14]. However, beginning in the early 1980s, more orthodox publications began identifying specific diseases and medical conditions that have been treated by camel milk or urine, including chronic hepatitis [15], hepatitis C infection [16,17], cancer [17], and peptic ulcers [14,18,19].

Urotherapy is classified under the category of alternative medicine, is a common practice in many countries, and is particularly significant in countries like India and China where alternative medicine is widely practiced [20,21]. Human urine is the most widely used, it is used in the treatment of different human diseases [20]. However, it is not restricted to these countries, with practitioners being found in the United States, United Kingdom and other European countries [22].

The religious aspect of using camel urine stems from the fact that there has been convincing evidence that the Prophet Mohamed advised its use in the treatment of a wide range of diseases [19,23,24]. Camel's milk and urine are used for the treatment of various diseases, such as cancer, ulcers, skin problems, chronic hepatitis, hepatitis C, stomach infections, a weakened immune system, infectious diseases and certain cardiovascular conditions [19,25].

Furthermore, camel milk is endowed with anti-malignant [26], antiplatelet [12], and anti- thrombotic properties [27] in addition to a host of anti-bacterial and viral properties [20], suggesting, among other things, the existence of a very strong immune system, which was recently shown to be equipped with unique light-chain-only antibodies [28]. These claimed therapeutic actions have recently been the subject of numerous studies, and there is now mounting scientific information detailing the constituents of camel milk and urine as well as their therapeutic components. These revelations lend scientific evidence to support the current practice of using these camel products for their therapeutic benefits. Camel milk possesses medicinal properties to treat different ailments such as multiple sclerosis, psoriasis, lupus, allergies-asthma [29].

A Belgian biotechnology company (Ablynx NV, Ghent/Zwijnaarde, Belgium) has been testing these recently discovered unique features of the camel's immune system and its implications on human health by using animals from the camelid family (camels and llamas) to develop immune therapy for the treatment of cancer and other autoimmune diseases, like multiple sclerosis and Alzheimer's disease [30].

PMF contains some amino acids as theronine, Cysteine, tyrosine and methionine which are very important for damage the proliferation cancer cell. The presence of both peptide and receptor has been found to bind OGFr (opiod growth factor) and hence a reduction in OGFr- OGFr interactions that would repress cell replication [31]. Also, S- Methylglutathione in PMF extracted content acts as an important defense mechanism against certain toxic compounds such as drugs and carcinogens. In conclusions, this extracted PMF may be used as anticancer and antioxidants for many diseases [19,31].

Whereas numerous amino acids regulate various functions in normal cells and in oncogenesis. Receptor tyrosine-specific protein kinases are a subclass of cell-surface growth-factor receptors with an intrinsic, ligand-controlled tyrosine-kinase activity, and they are important target because they play an important role in the modulation of growth factor signaling [32]. Meanwhile, presence of tyrosine enhances the efficiency and selectivity of PMF on cancer cells. Glycine and cysteine, amino acids entering to glutathione structure, enhance its antioxidant activity and further improve the immune system. Arginine has immunomodulatory effects, such as stimulating T- and natural killer cells activity and influencing pro-inflammatory cytokine levels through activating interleukin-12 (IL-12) [33]. It also induces IL-23 that leads to the production of interferons (IFNs) and other tumor-suppressive factors. These molecules are activated as part of the antitumor immunity response and promote apoptosis to tumor cells [34].

We therefore conclude from what is observed and suggest possible link between PMF and camel milk drink in this patient's tremendous improvement from MS. Further research is necessary including case series documentations to further reinforce the hypothesis that can be proven in larger case-control or cohort studies.

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