# 04 - ENERGY PROFILE OF CYSTIC FIBROSIS OF PANCREAS – MUCOVISCIDOSIS, WITH RYODORAKU ELETRODIAGNOSTIC IN ACUPUNCTURE

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#### INTRODUCTION

The cystic fibrosis or mucoviscidosis is the most common severe recessive genetic diseases, with an estimated incidence of one case per 2.5 thousand live births (Raskin, 2001). This disease is caused by an inborn error of metabolism, both the serous glands and mucous membranes are affected by the disease, the secretions produced by these glands are unusually thick and get stuck in different tubules of the body, causing obstructions responsible for morphological changes. It is a multisystem disease and variable expression that may begin at any time of life and with many complications.

Cystic fibrosis affects the digestive and respiratory and sweat glands. The obstruction of the pancreatic secretion by more viscous prevents the digestive enzymes are released in the intestine. The patient has poor absorption of nutrients and not gain weight, despite eating well. It also increased the number of bowel movements a day and eliminates bulky stools, foul-smelling and greasy. This obstruction by thicker secretions can also affect the bile ducts. The bile retained in the liver facilitates the onset of an inflammatory process. However, the respiratory tract is the most delicate of the disease. The lungs produce thick mucus that may be trapped in the airways and be invaded by bacteria. Other symptoms with cough and productive, recurrent pneumonia, chronic bronchitis. The change in ion transport in sweat glands is committed to elimination of chlorine. Increased levels of chlorine help retain water and sodium which leaves the sweat saltier. Women with cystic fibrosis have more difficulty getting pregnant because the cervical mucus thicker hinders the passage of sperm. Already 98% of men are sterile, although performance and sexual potency absolutely normal (ROSA, 2008).

Cystic Fibrosis includes one group of diseases COPD (chronic obstructive pulmonary disease) characterized by having a chronic obstruction of the airways, reducing the capacity of ventilation.

According to Traditional Chinese Medicine, Cystic Fibrosis is due to deficiency of Jing pre-heaven, the essence of existing kidney, which is acquired impaired parents at conception, thus causing changes in the processing and transport of Qi (energy) leading to patterns of disharmony (Clavey, 2000).

The Ryodoraku's technique of electrodiagnostic was developed Nakatami by the University of Osaka in the 50's, which has arisen from studies of this author, showing bio-electric changes due to imbalances that Acupuncture is called energy-type stagnation or deficiency of energy vital (Imamura, 1995). Nowadays, we know that the variation in the meridians called "bio-power" is actually what is known as impedance.

Despite this diagnostic technique energy have emerged in the 50s, there have been few scientific studies showing its clinical applicability as a therapeutic resource assessment, which is one reason that the motive for this study.

In the study of Acupuncture for a proper selection of points is clinically appropriate to seek the nature of the syndromes. This syndromic, considers among other things, information on aspects of tongue, physiognomy and pulse. This assessment of pulse, reflects the condition of energy as is the distribution of vital energy channels known as meridians (Macciocia, 1996).

Despite the Acupuncture part of Traditional Chinese Medicine, historically documented since the year 400 BC, there is a lack of information standards syndromic diseases have been described by science recently. Therefore, there are studies and descriptions of what the behavior of energy imbalances in the meridians in the case of cystic fibrosis.

### OBJECTIVE

The aim of this study was to evaluate the energy profile of patients with cystic fibrosis, with the technique Ryodoraku electrodiagnostic in Acupuncture.

## METHODOLOGY

Fifteen volunteers were evaluated between 4 and 47 years of age, diagnosed with cystic fibrosis who are monitoring the conditions in Support Association Mucoviscidosis of Paraná, in the city of Curitiba. Was initially selected the charts of patients referred to the Association, with more than one years of diagnosis of CF, without other chronic diseases.

Ryodoraku technique consists of a reading with bases in impedance, based on the electrophysical properties or bioelectric body and the regulation of the autonomic nervous system (Imamura, 1995). This method is a correlation between the conditions of the energy meridians and permeability electric the representative points of the technique.

For material, we used a device brand bioprocessing (Biotrat®), with two outs, with interrupted galvanic current of 200 uA, with an intensity of 12 V at frequency of 1 to 10 Hz with pulse width of 1 ms. Cotton wool, saline 0.9%.

After an initial contact was selected volunteers who were willing to participate. It was explained the procedures and collected the signatures on the consent form. The volunteers were prepared, and removed jewelry and metals in the wrists, fingers and ankle socks and shoes, as recommended by the technique. He set the device, calibrating the same, followed by preparation of the electrode-shaped pipe which was filled with cotton wool and saline 0.9%. Volunteers were seen sitting in easy chair with reading being done at acupoints of the wrist and ankle bilateral, as recommended by the technical (L9, PC7, H7, LI5, SI5, SJ4, GB41, ST41, KI4, SP3, LR3 and BL65).

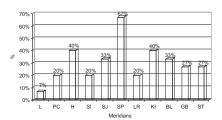
The unit reports a number, which translates into milliamps information. After the readings of the 24 resulting values, they are transported to a standardized chart Nakatami (1977) and criteria defined by the author of this technique, it is checked whether the values found are within normal ranges or not. If the reading is found increased, corresponds to the pattern known in acupuncture as stagnation or "excess" energy of the meridian and, if decreased, corresponding to energy deficiency.

#### RESULTS

In the presentation of Chart 1 shows that all 15 volunteers surveyed (100%) showed some energy imbalance in at least one of the twelve meridians. The Spleen (SP) meridian, presented in an imbalance of 10 volunteers, representing 67% of

the population, followed by the Kidney meridian and Heart, present in 6 volunteers, respectively (40% in each meridian). Other unbalanced meridians followed with the following scores: Bladder and Sanjiao in 5 volunteers (33%), Gallbladder and Stomach with 4 volunteers each (27%), Small Intestine, Large Intestine, Pericardium and Liver with 3 volunteers each (20%) and Lung with 1 volunteer (7%) of the sample.

CHART 1 - PERCENTAGE OF AFFECTION (IMBALANCE) IN MERIDIANS OF FIFTEEN RESEARCH ON FIBROCYSTIC IN ELECTRODIAGNOSIS RYODORAKU



#### ARGUMENT

The Spleen meridian was involved appearing in 67% of volunteers. We must remember that the Spleen (Pi) is the Zang (organ) responsible for post-Jing Qi celestial, which creates disharmony in metabolic, digestive and increase the production of mucus (Clavey, 2000), these symptoms found in Mucoviscidosis.

We observed a high percentage of imbalance in the Kidney meridian, which is consistent according to the literature (Clavey, 2000), because the Kidney is responsible for the origin of the disease by pre-Jing celestial. But, because it is a physiological condition that affects the Lung, one would expect theoretically that the meridian corresponding to this organ was quite involved, which is not shown by the technique Ryodoraku, affecting only 7% of cases.

This fact suggests that the degree of pulmonary impairment is primarily related to the imbalance of the Spleen as justifying the study of energy physiology (Maciocia, 1996), and the law of generation in the 5 elements, where the imbalance of the spleen, earth representation, leads to imbalances in the "son" lung, representative of the metal element (ROSS, 1994). As the degree of glandular systems and crises of dehydration and malnutrition are also directly associated with the imbalance this oran and its relationship in the production of phlegm.

Acupuncture has at its base and source of a preventive character. When analyzing the case of these results, where the meridian is the most affected spleen and not the Lung, it is understood that the information Ryodoraku electrodiagnosis showed us was that managed to be able to capture an imbalance in the energy source (Spleen) and not necessarily on its consequences (Lung).

## CONCLUSIONS

The traditional evaluation of the wrist, is made by palpation on the bed of the radial artery of the patient's arm, and this technique requires training time and large area to enable a specialist in Acupuncture, in use it safely.

The Ryodoraku electrodiagnostic is to nurture a newer technology not only evaluation of energy condition, but also to contribute to a record number of such information. The technique of Ryodoraku as electrodiagnosis, was adequate as a tool to draw an energy profile of patients with cystic fibrosis and may be a useful tool for the assessment of imbalances in Acupuncture.

We conclude, the meridian often unbalanced in patients with cystic fibrosis research, was the Spleen, which leads us to consider and confirm the assumption that the energy source is located there, although the main symptoms and organ shock is the Lung.

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## ABSTRACT

This study aimed to determine the energy profile of patients with Cystic Fibrosis (CF), using the technique of Ryodoraku electrodiagnostic in Acupuncture. This assessment is a method of reading bioelectrical (impedance) on specific points of the body, the results of evaluating the Acupuncture meridians and translate the so-called energy imbalance. Fifteen volunteers were evaluated between 4 and 47 years, CF (mucoviscidosis or). In 100% of the sample was obtained by energy imbalance technique Ryodoraku electrodiagnostic, and the meridian of the Spleen (SP) showed imbalance in 67% of the volunteers followed by the Kidney meridian (KI) and Heart (H) with 40%; Sanjiao (SJ) and Bladder (B) with 33%; Gallbladder (GB) and Stomach (ST) with 23% Small Intestine (SI), Large Intestine (LI), Pericardium (PC) and Liver (LR) with 20% and Lung (L) with 7%. It follows that the more often unbalanced meridian was the Spleen (BP), which leads us to believe that the energy source is located there, although the main symptoms of shock and organ is the lung.

**KEYWORDS:** Cystic Fibrosis, Ryodoraku Electrodiagnosis, Acupuncture.

### RESUME

Cette étude visait à déterminer le profil énergétique des patients atteints de fibrose kystique, en utilisant la technique de l'électrodiagnostic Ryodoraku en Acupuncture. Cette évaluation est une méthode de lecture d'impédance (bioélectrique) sur des points spécifiques du corps, les résultats de l'évaluation des méridiens d'acupuncture et de traduire le déséquilibre que l'on appelle l'énergie. 15 volontaires ont été évaluées entre 4 et 47 ans, la fibrose kystique (mucoviscidose). Dans 100% de l'échantillon a été obtenu par l'énergie d'équilibrage technique Ryodoraku électrodiagnostic, et les méridiens de la Rate-Pancréas (RP) a montré un déséquilibre dans 67% des volontaires suivis par le méridien du rein (R) et du Cœur (C) avec 40%; Sanjiao (SJ) et de la Vessie (V), avec 33%; Vésicule Biliaire (VB) et de l'estomac (E), avec 23% de l'intestin Grêle (IG), le Gros Intestin (GI), le péricarde (PC) et du Foie (F) avec 20% et les Poumons (P) avec 7%. Il s'ensuit que le méridien déséquilibrée plus souvent a été la rate (RP), qui nous conduit à penser que la source d'énergie se trouve là, bien que les principaux symptômes de choc et d'organe est le poumon.

MOTS-CLÉS: Fibrose Kystique, Ryodoraku Electrodiagnosis, Acupuncture.

#### RESUMEN

Este estudio tuvo como objetivo determinar el perfil energético de los pacientes con Fibrosis Quística (FQ), utilizando la técnica de electrodiagnóstico Ryodoraku en Acupuntura. Esta evaluación es un método de lectura bioeléctrica (impedancia) sobre puntos específicos del cuerpo, los resultados de la evaluación de los meridianos de Acupuntura y traducir el desequilibrio de la energía. Quinze voluntarios fueron evaluados entre 4 y 47 años, la fibrosis quística (mucoviscidosis). En el 100% de la muestra fue obtenido deseguilíbrios de la energía de los meridianos por la de técnica Ryodoraku electrodiagnóstico, y el meridiano del Bazo-Ppáncreas (BP), mostró un desequilibrio en el 67% de los voluntarios seguido por el meridiano de Riñón (R) y Corazón (C) con un 40%; Triple Calentador (TC) y de la Vejiga (V) con 33%; la Vesícula Biliar (VB) y Estómago (E) con el 23% del Intestino Delgado (ID), el Intestino Grueso (IG), el Pericardio (PC) y el Hígado (H) con el 20% y el Pulmón (P) con el 7%. De ello se deduce que el meridiano desequilibrada con más frecuencia fue el Bazo (BP), que nos lleva a creer que la fuente de energía se encuentra allí, aunque los principales síntomas y el órgano es el Pulmón.

PALABRAS-CLAVE: Fibrosis quística, Ryodoraku Electrodiagnóstico, Acupuntura.

#### RESUMO

Este trabalho objetivou verificar o perfil energético dos pacientes portadores de Fibrose Cística, através da técnica de eletrodiagnóstico Ryodoraku, em Acupuntura. Esta avaliação consiste em um método de leitura bioelétrica (impedância), em pontos específicos do corpo, cuios resultados avaliam os meridianos de Acupuntura e traduzem os chamados deseguilíbrios energéticos. Foram avaliados 15 voluntários entre 4 e 47 anos portadores de fibrose cística (mucoviscidose). Em 100% da amostra houve desequilíbrios energéticos captados pela técnica de eletrodiagnóstico Ryodoraku, sendo que o meridiano do Baço-Pancreas (BP) apresentou desequilíbrio em 67% dos voluntários seguido pelo meridiano do Rim (R) e do Coração (C) com 40%; Triplo Aquècedor (TA) e Bexiga (B) com 33%; Vesícula Biliar (VB) e Estomago (E) com 23%; Intestino Delgado (ID), Intestino Grosso (IG), Pericárdio (PC) e Fígado (F) com 20% e Pulmão (P) com 7%. Conclui-se que o meridiano mais frequentemente desequilibrado nos portadores de Fibrose Cística pesquisados, foi o Baço-Pancreas (BP), o que nos remete a considerar que a origem energética está ai localizada, embora os principais sintomas e órgão de choque seja o pulmão. PALAVRAS-CHAVE: Fibrose cística, Eletrodiagnóstico Ryodoraku, Acupuntura.

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