Periodic Paralysis Publication
(in the process of development)

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It is important to note that in the discussion about Periodic Paralysis, we use the term interchangeably as a process and also as product, particular thing or disease. The terms hyper, hypo, and normo are terms used to describe processes of potassium within the body and cells. Hyperkalemia, Hypokalemia, and Normokalemia are particular categories of unusual states of potassium within the body and cells. The discussion gets real confusing when we forget the differences between processes and products.

There are multiple types of periodic paralysis all of which are classified according to primary cause. Some types are resultant of genetic mutations and other types are caused by environmental, dietary and metabolic influences.

The type of periodic paralysis discussed in this publication addresses metabolic acidosis as a cause of potassium shifting. Body acidity levels can be measured through standard blood tests or by portable digital testing equipment.

Periodic paralysis is characterized by shifts of potassium. Hyperkalemic Periodic Paralysis is indicative of increases in potassium levels. Hypokalemic Periodic Paralysis is indicative of decreases in potassium levels. Normokalemic Periodic Paralysis is indicative of shifts within the normal levels in potassium or no shifting. Normokalemia is often referred to as a variant of Hyperkalemia. In all cases the speed and degree of the potassium shifting determines the severity of physiological symptoms.

Shifts in potassium are interdependent on a wide array of variables. Nothing

happens in isolation within the body. Sodium, calcium, magnesium, and potassium all work in conjunction to keep cells performing at optimal levels and changes in one chemical concentration effects concentration levels of other chemicals. The cell membrane plays a key role in determining abnormal shifts in potassium. With Periodic Paralysis, potassium acts in abnormal ways due many conditions.

Definition of Periodic Paralysis
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Discussion about Periodic Paralysis
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Types of Periodic Paralysis
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Causes of Periodic Paralysis
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Metabolic Acidosis

Acids play a key role in potassium shifting. This is a comprehensive publication regarding Metabolic Acidosis which was recognized by the American Thoracic Society. “A metabolic acidosis can cause significant physiological effects, particularly affecting the respiratory and cardiovascular systems.” Metabolic acidosis can cause “Shift of K+ out of cells causing hyperkalaemia.” ('Acid-base pHysiology' by Kerry Brandis, 1981).

After having some conversations with a medical lab regarding the science behind the measurement of Anion Gap, I discovered many alarming issues that are worth sharing. The first issue relates to how a condition/state of Metabolic Acidosis is determined. As further research on my part has pointed out, there are 3types of measurements and several methods used to determine a state of Metabolic Acidosis. These processes get real complicated and practically incomprehensible for anyone outside the range of professional chemistry. I have yet to find someone with this expertise who can talk in practical terms. This might be due to several reasons. The first reason being that the subject is so highly technical that it cannot be discussed in layman terms. The second reason being that very few scientists can explain scientific concepts in down-to-earth language. The third very real possibility is that the science behind measuring Metabolic Acidosis is flawed and has serious limitations. Since I cannot get straight answers from professionals then I will continue to believe that the science seriously flawed. Here is a more detailed assessment of the testing processes.

(insert text)

Experience has proven this conclusion to be true. I wouldn't go as far as to assume there is some kind of massive conspiracy going on to keep people ill, but as we all know, stranger thing have happened when we are dealing with pharmaceutical companies, the Food and Drug Association and the American Medical Association.

Several things are certain at this point in time. Medical professionals have very little knowledge of the science behind those numbers we see on lab reports. Medical professionals have very few treatment options for serious illness outside of administering pharmaceutical drugs or performing invasive surgeries. For most people this doesn't mean a heck of a lot because they never get seriously ill. For the rest of us with physical symptoms of unknown origins, this means a lot. We are left alone to figure out what is causing symptoms that medical professionals are unable to address. We have very few people who are real healers in this country or people who understand the basics of the rudimentary causes of human disease. This opens the doors to quackery and charaitans and very sick people getting taken advantage of in their personal quest to get well. My favorite form of quackery is in the area of using mental imagery or positive thinking to control disease processes or cure metabolic based illnesses. When people are desperate for answers to mysterious health conditions, people will spend everything they own to find a cure.

Management o of Periodic Paralysis

Both types are manageable and the specific treatment depends on the specific symptoms. Most if not all medications prescribed to treat potassium shifting cause symptoms to increase or reverse with equal severity mainly due to the nature of of the drugs. Diuretics are designed to strip the body of alkaline dumping it through the kidneys and bladder (hypokalemia). We are currently experimenting with Potassium Bicarbonate to treat the Metabolic Acidosis that accompanies/causes potassium shifts. Careful monitoring is needed to prevent hyper/hypo from happening while making adjustments to potassium levels. It would be wise to start with half of any recommended daily allowances just for precaution sake. Bicarbonates administered intravenously can cause the person to spiral into a state of hypokalemia. Any acid based drugs will cause hyperkalemia of varying degrees. All acid based substances tend to put the body into a highly acidic condition which can cause respiratory failure, kidney shutdown, and possibly sudden cardiac arrest.

Anything you do, other than eating the properly balanced diet (high alkaline and low acid) is risking worsening of symptoms. Periodic Paralysis of all types cannot be treated the same way clinicians treat other medical conditions which consists of popping pills or cutting you open. It takes time and effort to manage symptoms with hopes of gaining back some degree of quality of daily life.
So how can it be managed?

The only safe way to manage Periodic Paralysis is through diet, oxygen and citrate and bicarbonate forms of Potassium depending on the type of paralysis. Eating foods that are mainly alkaline-based will help your body achieve a pH balance that does not rely on stripping potassium and other minerals and nutrients from muscles, organs and bones in order to maintain balance. Eating plants is a much more efficient way to get the vitamins and minerals our cells need to function. Eating highly acidic foods such as meats causes the body to work harder and can bring on metabolic acidosis. A person with Periodic Paralysis should avoid all non-food substances like they are poison because they are poison. Soy products are an excellent alternative to meat and dairy products. Using oxygen throughout the day (the amount being determined by the severity and frequency of symptoms) will counter the acidic effects of carbon dioxide. The other treatment of attacks of hyperkalemia (high acid) is to hyperventilate during periods of hyperkalemia thereby expelling carbon dioxide at a higher than normal rate. This is nature's natural remedy for high acidity. Common sense tells us not to allow people to hyperventilate but in the case of riding the body of excess acid, this is an effective treatment. Forcing someone to stop hyperventilation might cause symptoms to worsen or recovery seriously delayed. It is extremely important to rule out other possible causes of potassium shifting and acidity. All of the major organs need to be looked at for possible causes of symptoms. Kidney disease will cause the same symptoms. Heart disease will cause the same symptoms. Lung or other cancers will cause the same symptoms. Everything else needs to be ruled out before arriving at any conclusions.

When you experience hyperkalemic episodes you might feel like there is a ton of weight on your chest restricting your breathing. With other medical causes ruled out, what you are experiencing is resulting from potassium shifting effecting muscle groups around the diaphragm. At the same time acidity levels have increased and the body is trying to ride itself of excess acid.
Some things seem contradictory but everything mentioned here has been tried with some success. On one hand most medical professionals don't know anything about Periodic Paralysis as a stand-alone medical disease. So how could they identify something they know nothing about? The medical professionals who are professionals will follow up with additional testing to identify the causes before jumping to the conclusion that you are faking symptoms, a hypochondriac, or worse yet diagnose you with conversion disorder or some other mental illness of of a somatic nature.
On the other hand you must trust someone to conduct the right tests to identify the causes of your symptoms. It is up to you to educate yourself and educate the medical professionals you choose to work with. Take a lot of time to check the history and credentials of the medical professionals you choose to work with. Talk to neighbors and friends to locate someone who listens and is willing to learn. They are out there but few and far between. This is a nightmarish disease to diagnose and even worse to live with until you understand the dynamics and

begin to treat the symptoms and causes of the disease. It might be helpful to have a professional counselor to help you and your family manage the daily challenges.

Diagnosis of Periodic Paralysis

The reason why Periodic Paralysis is so difficult to identify is due to the transitory nature of potassium shifting and due to the traditional nature of how clinicians view metabolic processes. Potassium shifting is not present all of the time and most clinicians use blood tests of potassium levels to identify the condition. Potassium shifting can appear and disappear very rapidly or can occur over an extended period. The second difficulty with diagnosing periodic paralysis with standard blood draws is due to the patient's incapacitated condition during paralytic episodes. A person in a paralytic episode is unable to move. How could they possibly get to a laboratory for a blood draw? And, blood draw services typically are not mobile and even if they were mobile, by the time the phlebotomist got to the patient, the potassium levels might have shifted to normal ranges. The other problem is with the type of Periodic Paralysis for which the test is being administered. Conditions of hyper, hypo, and normo all produce different results. Also, in patients identified with Periodic Paralysis, the ranges of normalcy differ from that of the general population from which the norms were established. For example; we have discovered with Susan that her potassium level norms (absence of paralytic symptoms) are between 3.5 and 4.0 which is far different from the established norms of the general population.
So what does this mean for you getting this condition diagnosed by a medical professional?

Medical Professionals

I cannot honestly tell anyone to put trust in the medical establishment to diagnose this disease. I believe that many people die from the effects of potassium shifting and metabolic acidosis and no one ever knows just exactly what caused their demise. I cannot imagine anyone surviving the ravaging effects of the disease while at the same time fight with medical professionals and insurance carriers to arrive at a correct diagnosis. This disease has devastated Susan and coping with multitudes of medical professionals and insurance carriers has practically ruined our resources both monetarily and morally. More than anything else, misdiagnosis have caused us harm. At one point in time Susan had been prescribed more than a dozen medications and none of the medical professionals showed any concern about the interactivity of the drugs. She was doing daily injections to treat Osteoporosis which turns out to have been caused by this disease. You do need someone you can trust by always remember that you are responsible for your own health care. You are in the drivers seat and you have to be diligent about the things you put into your body no matter how credible the outside source might appear to be. .
Some General Guidelines

General practioners should not be practicing medicine outside of their areas of expertise and they should not be allowed to blindly write prescriptions for conditions they do not understand. Every time you walk through the doorway of a medical professionals office, you put your life in their hands. Our experience has proven that these people just don't care or don't have the time to take care of your specific needs. We are all at the mercy of the medical establishment and have no protection or recourse against their failures other than to become informed.

Shopping for a doctor is similar to planning a health diet. It takes time to find the person who will best serve your individual needs. When looking for a doctor, you should talk with other people in the community who have had previous experience with that particular doctor. You should also look at things like the office environment. Ask yourself a few questions. When you enter their office for an appointment does it feel safe and clean? Does the office staff treat you with respect and do things seem organized?

You should expect the doctor to keep appointments in a timely manner. You should expect the doctor to take more than 30 minutes with you during each visit and spend some of the time listening to your concerns. Ask yourself if the doctor makes you feel important or does the doctor talk down to you treating you like your opinion doesn't count? Does the doctor talk with you about your diet and insist that you eat nutritious foods and eliminate the bad habits that are making you ill? Does the doctor suggest treatments for conditions that are not made in a pharmacy? Does the doctor write a prescription before conducting an thorough examination?

You should stay clear of doctors who only know how to write prescriptions and perform surgeries. A doctor can be honest without insulting or blaming you and help you get on the right path towards proper nutrition and health. If the doctor or staff make you feel uncomfortable while you are there then turn around and look for another provider. When you get home, get online and write an honest evaluation of your experience on Angie's List where other people can review. As more people come forward with symptoms, eventually the medical establishment will take this disease seriously and begin to treat people with symptoms with credibility and respect. Getting a prescription or surgery are not always the best options. Force your doctor to give you options that are not written on a prescription pad or open up your body with surgical devices. There are many more things that can be done along the lines of nutrition that can be tried before shoving pills down our throats or looking for a diseased organ to remove with a scalpel.

Reference Materials

.” ('Acid-base pHysiology'
by Kerry Brandis, 1981).

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