Journal ABSTRACTS

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Low Back Pain

BACKGROUND: Researchers at the Biological Immunity Research Institute, Scottsdale, Arizona have developed a lab test using urine & saliva. The test is unique because it has its roots in soil chemistry rather than the traditional medical approach. The test is called the Biological Immunity Analysis® (BIA).

Phase 1 Determine if the various BIA factors are significantly related to a patient's health. If the BIA factors can be related to wellness, it may be possible to use this simple, non invasive 10-minute evaluation technique as a *pre-diagnostic* wellness modality to determine trends and tendencies of a patient long before the patient experiences symptoms, or before traditional medical testing is able to detect them.

Phase 2 Discover what positive affects the dietary and lifestyle regime suggested by the BIA has on the various states of wellness. This regime is referred to as the Biological Immunity System® (BIS).

FACTORS: The test consists of 7 parameters; Sugar Brix, Urine pH, Saliva pH, Conductivity Cell Debris, Nitrate Nitrogen, Ammonia Nitrogen.

Sugar Brix (urine): (Goal: 1.5) A scale of 0-10 has been developed using a Sugar Brix refractometer.

Urine pH: (Goal: 6.4) A scale of 4.5-8.5 has been developed using a digital pH meter.

Saliva pH: (Goal: 6.4) A scale of 4.5-8.5 has been developed using a digital pH meter.

Conductivity (urine): (Goal: 7) A scale of 0-60 C-units has been developed using a Conductivity meter reading a scale of 0-40,000 micromhos. One micromho equals 1.5 C-units.

Cell Debris (urine): (Goal: 1) A scale of 1-4 has been developed using a visual measuring technique of the urine specimen.

Nitrate Nitrogen (urine): (Goal: 3) A scale of 1-14 has been developed using a color chart comparison to shape and color produced by the chemical reaction of the specimen with the specified reagents.

Ammonia Nitrogen (urine): (Goal: 3) A scale of 1-12 has been developed using a color chart comparison to color produced by the chemical reaction of the urine specimen with the specified reagents.

ENERGY CATEGORIES

Metabolism Efficiency (EM) : (Goal: 75%; Minimum Acceptable: 55%) A scale of 0-100 has been developed taking into account; 1) the value of each of the various factors and their respective scales and, 2) the position that each of the above factors have with regard to established acceptable ratios between the various factors.

In most cases, the higher the EM, the fewer symptoms and greater wellness the patient should exhibit, unless the number of Adverse Relationships (AR's) is excessive. In which case, it would indicate emotional stress, as opposed to physical or biochemistry stress, to be the cause of presenting symptoms. The EM may be used as a biofeedback tool to determine how well the patient is converting food into energy.

Reserve Energy (ER) : (Goal: 75%; Minimum Acceptable: 65%) A scale of 0-100 has been developed taking into account various factors identified as using the combined average of all previous EM's taking into account a Smoking Factor, Drug Factor and Surgery Factor. The Reserve Energy (ER) is designed to be a guide to the immunity and healing capacity of the patient. The EM can fluctuate much more rapidly than the ER, thus the ER gives an overview of progress made to date.

Biological Age (BA) : (Goal: Actual Age) A scale of 0-100 has been developed to furnish another biofeedback tool to measure the hypothetical effect of the present EM on the body. This serves as another measurement device to quickly assess the progress being made by the patient to restore balance and wellness to the body.

Adverse Relationships (AR) : (Goal: 0-4) A scale of 0-12 has been created by comparing the position of individual factors against each other. The greater the number of AR's, the more imbalanced and stressed the patient may be expected to be. The greater the AR's, the more emotional stress, as opposed to physical or biochemical stress, can be expected to be the cause of the presenting symptoms, unless the EM is also high, in which case emotional and toxin suppression may be expected. The greater the AR's, the deeper and more chronic the diagnosed problem is expected to be, and the longer it will take to bring balance and wellness to the body.

Speed of Decline (SD) : (Goal: 0-1) A scale of 0-4 has been developed by comparing the position of the Saliva pH on its scale relative to the position of the other factors. There are 4 relationships being observed. The Speed of Decline (SD) is determined by the number of Adverse Relationships involving the Saliva pH. The greater the SD, the greater the inertia behind the deterioration of the balance and wellness of the patient. It has been observed that a SD of 4 is very serious and almost impossible to treat. An SD of 3 is serious but seems to respond quite well to the proper regime.

Balanced Numbers: It has been observed that balance is related to wellness. The BIA is relative to each individual, as opposed to the usual method of comparing test results to accepted norms. This required a way of determining what each individual reading SHOULD BE relative to the remaining numbers. The discrepancy between what the actual reading is and what it should be becomes all-important in determining the nature of the imbalance and how it should be treated. This Balanced Numbers concept overcomes the difficulty presented by the urine becoming diluted or concentrated due to many factors occurring throughout the day.

Balance Chart: A Balance Chart was created to graph each BIA factor. Wellness may be depicted by a near horizontal line created by individual BIA components being plotted on the graph. It has been observed that the profiles exhibited by differing graphs can be associated with various presenting symptoms. It has also been observed that as the patient follows the proper regime resulting in the Balance Chart moving toward a horizontal line, the presenting symptoms disappear and the EM rises, ER rises, BA declines, AR's decrease and SD decreases.

LOW BACK PAIN GROUP: Out of 1569 test subjects (Control Group) aged 10-80 years, 409 subjects (test Group) indicated having LOW BACK PAIN.

FINDINGS

Sugar Brix
The Test Group (409) was 40% more likely to have Urine Sugar Brix reading of 6.9-7.6 and 9% more likely to have a Sugar Brix reading higher than the Balanced Sugar Brix reading.

Urine pH
The Test Group (409) was 18% more likely to have a Urine pH between 6.5 and 6.9 and 8% more likely to have a Urine pH reading higher than the Balanced Urine pH.

Saliva pH
The Test Group (409) was 38% more likely to have a Saliva pH between 5.5-6.0 and 20% more likely to have a Saliva pH between 7.5-7.9. In addition, the Test Group was 27% more likely to have an Over-Balanced SpH.

Both pH
The Test Group (409) was 11% more likely to have a Saliva pH lower than the Urine pH.

Conductivity
The Test Group (409) was 24% more likely to have a Conductivity reading between 26-37 and 17% more likely to be 10-19 points lower than Balanced.

Salts/Nitrogen Ratio
The Test Group (409) was 7% more likely to have a Salts (Conductivity) to Nitrogens ratio less than 1.5 (1.5 is observed to be optimum).

Nitrate Nitrogen
The Test Group (409) was 7% more likely to have a Nitrate reading of 11+.

Ammonia Nitrogen
The Test Group (409) was 13% more likely to exceed the Nitrate Nitrogen reading by 1-4 points.

Nitrate/Ammonia Ratio
The Test Group (409) was 11% more likely to have a Nitrate/ Ammonia ratio less than 1.

EM
The Test Group (409) was 50% more likely to have a Metabolism Efficiency (EM) reading of 5-24%.

AR's
The Test Group (409) was 11% more likely to have Adverse Relationships (AR's) between 6-7.

Brix Interpretation

Because the Sugar Brix scale is sensitive to specific gravity, it is likely that, as the person consumes a diet high in fats, oils and sugars, that the Urine Sugar Brix scale will rise. As the concentration of the blood increases, the urine can be expected to be more concentrated, causing the Urine Sugar Brix to rise. As the Sugar Brix rises, less freedom of movement and increased pain has been observed.

As the Sugar Brix, rises symptoms tend to move toward the rear half of the body. This would account for the increased prevalence of Low Back Pain. Chronic degeneration also appears to be more prevalent when the Sugar Brix climbs, especially if the Actual Sugar reading is Over-Balanced. This appears to indicate a tremendous energy loss by the body.

A diet high in Potassium, Chromium and Calcium may reduce this Over-Balanced Sugar reading. In addition, a lifestyle including lymphatic stimulation, exercise and adequate pure water will assist in lowering this High Sugar reading.

When the patient is allowed to participate in therapy which encourages the release of past grief, guilt, and resentment issues, the Over-Balanced Sugar Brix reading will decrease and, as it does, the Low Back Pain symptoms will decrease correspondingly.

Urine pH Interpretation

Because the Urine pH is supposed to be acid, the fact that the Urine pH is more likely to be too alkaline, but remain close to perfect, in people with low back pain appears to be associated with the tendency to ignore problems until the pressure they represent becomes so unbearable that the patient is forced to deal with it. This inability, or unwillingness, to deal with the cause issues appears to gradually tax the alkaline reserves which then become deficient. The acids, which require bonding and buffering with alkaline minerals, tend to remain in the body and cause Low Back Pain.

Increased Vitamin C, Calcium Lactate, lemon juice, Vitamin A and Trace Minerals as well as a diet high in Sulfur, Calcium, Sodium and alkaline minerals may restore the acid Urine pH and the ability of the kidneys to once again eliminate the acids. Further research is expected to show that the Low Back Pain symptoms decrease as we see balance once again restored to the Urine pH.

Saliva pH Interpretation

The fact that the Saliva pH is more likely to be very alkaline as well as very acid in this Test Group may be because the more stressed an individual is the higher the Saliva pH can be expected to be. It is as though the Saliva pH, relative to the rest of the BIA, is a measurement of the body's vitality level; the body's ability to respond, or resist to the aggression in the patient's environment. This aggression can be expected to produce an increased level of acid which needs to be neutralized. The higher incidence of Over-Balanced SpH in the Test Group appears to support the theory that patients suffering from Low Back Pain are experiencing severe aggression in their life, from either an environmental or emotional origin.

As the distress continues, whether due to environmental or poor dietary factors, the body loses the ability to effectively eliminate the acids. When this happens, the UpH travels Over-Balanced or alkaline, and the SpH reverses and travels acid, or Under-Balanced. This is why the Test Group is more likely to have a Urine pH higher than the Saliva pH as well as why there is a higher incidence of very high SpH as well as the low SpH. This may indicate that the acids are not being eliminated (high UpH) and are building up in the system (low SpH). This is going to increase the symptom of Low Back Pain.

It has been observed that as the correct dietary and lifestyle regime of increased alkaline foods, decreased meats and grains, Ascorbate Vitamin C, Calcium Phosphate, Vitamin B12, Liver Support, Digestive Enzymes, increased rest and decreased exercise is followed, the Urine pH and Saliva pH once again return to their correct positions. As this happens the level of Low Back Pain also decreases.

Conductivity Interpretation

The Salts (Conductivity) reading, being more likely to be upper mid-scale in the Test Group, as well as being Under-Balanced appears to be a dichotomy, but our many years of experience with the BIA assists us in an explanation.

The Conductivity (Salts) reading appears to be associated with the alkaline reserves of the body. Stress initially raises the Conductivity level. This explains the rising Salt reading in the Test Group. As the patient gradually loses the vitality necessary to adequately respond to the stress, the Conductivity (Salts) reading decreases or becomes Under-Balanced. This explains the high incidence of Under-Balanced Salts reading.

As the Salts reading rises, anti-oxidants such as Vitamin E, Selenium Vitamin C and Vitamin A may assist in bringing this reading back under control. It has also been observed that, as the Salts reading falls to Under-Balanced, Trace Minerals, Electrolytes, Calcium, and Ascorbate C complexes with minerals may assist in bringing this reading back to balanced.

We expect future research to show that as proper dietary and lifestyle modifications are initiated, the Salts reading decreases, becomes balanced, and the Low Back Pain symptoms are eliminated.

Salts/Nitrogens Ratio Interpretation

The Salts/Nitrogens Ratio, being more likely to be decreased, indicates that the Low Back Pain Test Group tends to have an excessive protein diet (high relative Nitrogens) and a low Alkaline Reserve (low Salts) which may have been caused by the excessive Protein pulling Calcium and other vital alkalizing minerals out of the body.

We have observed that, as the patient develops more chronic degeneration, the Salts/Nitrogens Ratio and the Salts reading tends to become Under-Balanced.

A decrease in dietary Protein, an increase in foods rich in Electrolytes, Calcium, Magnesium, B-complex, and Trace Minerals will help restore the Salts/Nitrogen Ratio. As the Salts/Nitrogen Ratio improves, so do the Low Back Pain symptoms.

Nitrate Nitrogen Interpretation

The higher incidence of Nitrate readings above 10 coincides with our observation that Low Back Pain is associated with elevated Nitrogen loss. This could be due to excess dietary protein, or inefficient protein digestion, or both.

If the Total Nitrogens are Over-Balanced and there is large spread between the Nitrate and Ammonia Nitrogens, then excess dietary protein may be suspected. If Total Nitrogens are balanced and the spread between the Nitrate and Ammonia Nitrogens is greater than 3 points, then inefficient Protein digestion may be suspected. In this case, HCl, Pepsin, and Pancreatic Enzymes may help to balance this condition.

Both situations may indicate a degeneration of the collagen tissue and a weakening of the connective tissue supporting the spinal column. As either of these Nitrogen profiles are corrected, the Low Back Pain symptoms may disappear.

Ammonia Nitrogen Interpretation

The high incidence of Ammonia Nitrogen being higher than Nitrate Nitrogen by 1-4 points follows along with our observation that low back pain INCREASES as the Ammonia Nitrogen reading increases.

Ammonia Nitrogen is many times more toxic than Nitrate Nitrogen. The presence of Ammonia Nitrogen in the BIA has been associated with chronic degeneration and pain. It has also been associated with a declining alkaline reserve. The body uses the high pH of Ammonia to conserve the alkaline minerals which are needed by the blood and other body systems.

A diet low in meats, fats and grains, and high in complex carbohydrates, vegetables and vegetable juices will help restore the proper Nitrate/Ammonia ratio of approximately 1.5. The supplementation of Pancreatic Enzymes, Calcium, Magnesium, Potassium and Amino Acids may also assist in correcting a low Nitrate/Ammonia ratio.

Nitrate/Ammonia Ratio Interpretation

The Nitrate/Ammonia Ratio being more likely to be LOW in the Test Group appears to be caused by the Ammonia rising rather than the Nitrate Nitrogen declining. It has been observed that as degeneration and pain become more frequent, the Ammonia Nitrogen is increased. We believe that the Ammonia Nitrogen is associated with body tissue destruction.

Since very little Ammonia should be present in the urine, it may be that this elevated reading may indicate the body's immune system lacks the vitality to deal with the problem. This type of BIA profile also indicated emotional suppression, which also is viewed by the body as radiation, causing Low Back Pain, among other symptoms, due to the pressure placed on the Central Nervous System.

Ammonia Nitrogen is associated with heat. The hotter the body becomes, the more Ammonia is generated as a cooling agent. It has been observed that darker skinned persons carry a higher Ammonia reading. This may be due to the darker skin absorbing more heat, requiring a higher Ammonia to maintain proper body temperature.

EM Interpretation

The Test Group's high incidence of low Metabolism Efficiency (EM) is expected because the higher the stress level of the patient the lower the EM may be expected to be. As the proper dietary and lifestyle alterations are made, the EM increases to more desirable levels and the patient's symptoms decrease. Low Back Pain symptoms also decline as the EM increases to more acceptable energy production levels.

AR Interpretation

The Test Group's high occurrence of AR's is expected because observation indicates that the more chronic degeneration develops within the patient, the higher the # of AR's appear in the BIA. This is good news/bad news. The good news is that the brain is aware of the imbalances indicated by the fact that they appear in the BIA. The bad news is that this may indicate an intolerable situation for the immune system and requires alkaline reserves and other valuable nutrients to repair the damage being caused by the environmental and emotional stress. It is our view that Low Back Pain is an EFFECT, not necessarily a cause.

Further research is expected to show that the Biological Immunity Analysis® and the accompanying Biological Immunity System® are effective in indicating what type of dietary and lifestyle regime a particular patient needs to adopt in order to reduce their Low Back Pain and prolong their life.

Information

For more information concerning the Biological Immunity Analysis® please contact the Biological Immunity Research Institute, 5722 S. Flamingo Rd., Ste 237, Cooper City, FL 33330, Tel: 954.217.6004, Fax: 636.216.6004, email: staff@biri.org.

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