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Patient **COMMUNICATING** With Confidence by Inexpensively Measuring EMGs

Getting patients to understand the importance of the situation that exists in their mouth is often very difficult. We usually try and explain things assuming that because we are the doctors, they will trust us. However, we live in a society where the media has exposed times when professionals have taken advantage of that trust. Many times unfairly, yet the damage to the trust in our profession has been harmed none the less. Being able to "prove" that what we are diagnosing is correct would help alleviate that fear of the patients. Especially if we can tell them how we will determine the diagnosis before we actually perform the exam and then show them measurable results of that exam.

As physiologic based dentists, we know that the muscles are the cause of 90% of the pain that our patients experience. Telling them that their muscles are not comfortable without being able to show them something that proves it will leave a lot of patients really questioning if it's true. Remember the quote from the late Barney Jankelson, **"If it can be measured, it's a fact... if it can't... it's an opinion."** Dentists who can't "measure" are put at a disadvantage. There may be patients that actually question the legitimacy of what the dentist is telling them. Hearing that their muscles are in a pathologic position without "proof," particularly if in their mind they have come up with other reasons they are experiencing the pain, like stress, leaves them questioning the validity of that diagnosis.

The problem with being able to "measure" has been the cost. The cost of the equipment to accurately measure the muscle activity has been prohibitive for many dentists. The Myotronics K7 is $32,000 and the LVI version of the BioPAK from BioResearch is $19,950. First let me say that I believe in order to do the best job possible you need the computerized equipment and if you don't have either, I would personally get the BioPAK as it's 60% the cost of the K7 and does everything you need to diagnose, treat and finish your cases. I know this because I designed and created the scans in the LVI version to do just that!

However, until someone feels comfortable with such a large purchase, they have had to depend on the TENS unit getting them to the correct position. Experienced physiologic dentists understand that in a lot of cases, the TENS won't get to that position by itself. Being able to measure the EMGs to make sure you are there and to determine the direction of bite correction is absolutely necessary. LVI trained physiologic dentists also understand that the anterior temporalis are the reins of the mandible and dictate the "position" of the mandible. Being able to measure that muscle is very important.

There is now an inexpensive way to measure selected muscle groups that makes it easy for EVERY physiologic dentist to help explain to the patients the pathological position their bite is in and where their physiologic position is. This will actually prove to the patient that the new physiologic position makes so much sense. It only measures one group of muscles as it only has two leads, but you can measure any set of muscles. **It's called the M-SCAN from BioResearch.** A cell phone sized device that can take two measurements then compares them showing the difference between the two. And the good news is that it only costs $995.

The first measurement of the anterior temporalis is the resting EMGs and it runs for five seconds. The second measurement is the CO resting position (teeth in light maximum Intercuspation). We all know that the CO rest should be close to the resting EMGs. The M-SCAN then mathematically calculates the difference between the two. It gives the doctor an easy way to effectively communicate with the patient by showing them a "measurable" diagnosis of their bite condition.

The patient explanation would go something like this:
"Mrs. Jones, the reason for your headaches might be your bite. We can determine if your bite is the cause by measuring the muscles in the temple area as that is the muscle group that mostly controls the position of your jaw and these muscles are responsible for a good portion of peoples headaches. I will put these electrodes on your temple and measure them in two different jaw positions. One is when you are relaxing and we will help get you

to the relaxed position by TENSing you with an ultra-low frequency TENS unit for about an hour. It works like an electronic massage on these muscles. After that we will run a resting or relaxed scan of the muscles. I will then ask you to put your teeth lightly together, making sure that your back teeth are together but not clenching. I will then run another scan in that position. If your bite is in the physiologic position it should be, then the two numbers will be close. If your bite is in a pathologic position, then the bottom number, the one with the teeth together, will be higher. Depending on the difference of the two will tell us HOW pathologic your bite is. The measuring device will compare the difference and give us a number of that difference. For example, if your resting EMGs are 1.5 and your bite EMGs are 4.5, then the difference is 3.0. That would indicate that your bite is pathologic or not in its correct position and could very well be responsible for your headaches. Your resting EMGs should be below two, so if that's not happening, then we need to try and relax you some more. Do you understand?"

So for those of you who don't have the computerized equipment, this is your answer until you can afford or justify the BioPAK, where you can measure all the muscles, or evaluate range of motion to determine pathology and its cause, or velocity of closure which determines pathology in the joint, and jaw tracking to determine where in space the bite should be, etc. But for now you can measure and display to your patients the diagnostic condition of their bite position, good or bad. Case acceptance will be easier and more frequent since the patient's education includes a measurable diagnosis. Giving the patient a visual reference of the condition of their bite will dramatically enhance case acceptance and allow you to help them get rid of a lifetime of pain. This will give your practice the respect and confidence in your patients and drive more patient referrals.

We are now using the M-Scan in our **CORE I** program **(Advanced Functional Physiologic Dentistry)** along with the TAG Bite and the students can now see how good the bites are that they take on each other. It's helpful to show them the power of what LVI style dentistry can do and gets them onboard my passion filled purpose and our mission at LVI to change dentistry for the better.

For more information visit www.bioresearchinc.com

UPCOMING CORE I
www.lviglobal.com/CORE I
September 30-October 1, 2016 (Toronto)
November 30- December 2, 2016
March 1-3, 2017
July 19-21, 2017
September 6-8, 2017
November 29- December 1, 2017

''Numbers have an important story to tell. They rely on you to give them a clear and convincing voice.''

Stephen Few