# Overcoming Bells Palsy



# Part I – The First 4 Days By Gunnar Mossblad

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or a professional saxophonist, or any windplayer, the embouchure is the most important connection to your instrument. It serves as the seal for the air stream and is the final adjustment for the quality of the tone, pitch, timbre and response of the instrument. Have you ever thought what you would do if you woke up one day and could not form an embouchure? Well, I have not only thought about it, it happened to me.

### A TYPICAL SATURDAY MORNING

It was a typical Saturday morning. The boys were watching the Saturday morning parade of cartoons and playing on the floor of the family room while my wife and I read the paper and drank coffee. I was feeling particularly good that morning. The night before I enjoyed a good jazz gig with some great players, and was looking forward to hearing Dave Liebman at Chris' Cafe in Philadelphia that evening. As had become the tradition, when I finished the paper, I went to my shop to catch up on the horn repairs and mouthpiece re-facing that had piled up during the previous week. This particular morning a number of mouthpieces from The University of Nevada Las Vegas had come in for adjustment and a soprano piece for David Liebman needed to be finished so Dave could try it that night.

I unpacked the mouthpieces, laid them out on the bench, and decided to start on a wooden *LeBayle* alto piece. According to the accompanying note, the mouthpiece was too bright and not as responsive as it should be. After balancing the facing and taking the baffle down a little, I put a reed on it and grabbed my alto to test it. What came out was well, a honk, a very loud honk. On top of that, the mouthpiece slid to the left side of my face. I was startled, but since it was not my setup, I immediately thought it was the mouthpiece. In fact, I remember thinking, "what is wrong with this thing," and I even checked the top of the mouthpiece to see if there was an extra smooth finish on it. After checking the reed, I tried to play

it again. I got the same results. After a couple more failed attempts to play, I went to a mirror.

# THE LEFT SIDE OF MY FACE PUFFED UNCONTROLLABLY

To my horror, every time I attempted to blow a note, the left side of my face puffed out uncontrollably for an instant and I could not even keep the seal around my mouthpiece. Realizing I was the problem, not the mouthpiece, I tried various facial expressions, and realized that I had no control over the left side of my face. In fact, I did not even have any wrinkles on the left side of my face. The wrinkles that normally went across my entire forehead stopped right in the middle, and the entire left side of my face appeared to droop.

I could hardly believe what I was seeing. I felt perfectly healthy. I confirmed my suspicions with my wife, and then called my family doctor. The doctor's office had just closed for the weekend, so the answering service paged him. While I waited the two minutes (which felt like an eternity) for the doctor to call back, the reality that I could not play my horn hit me. My schedule of performances for the next weeks passed through my head. In only one week, I had a video shoot in Nashville for a very talented songwriter/ performer John C. Fishell. A few days after that, the  $2^{\rm nd}$ performance of a 21st century classical piece written especially for me by the composer Larry Nelson was to take place. A couple of weeks after that a concert with David Liebman performing John Coltrane's Meditations Suite was scheduled. All these concerts were both musically and personally important to me.

### THE DOCTOR CALLED BACK

When the doctor called back, my concerns had grown. After a series of diagnostic questions that eliminated the possibility of a stroke, the doctor suggested that I might have had Bells Palsy. I had never heard of Bells Palsy. The doctor explained that it was a form of facial paralysis

resulting from inflammation or damage to the seventh cranial nerve. He also said that no one really knows what causes a Bells Palsy, but in the part of the country that I live, it is often linked to a deer tick bite and Lyme disease. He thankfully assured me that it was usually not a permanent condition, but he suggested that I go to the emergency room of the hospital rather than waiting to come to his office on Monday. He explained that immediate and aggressive treatment often shortens the episode.

In the next weeks and months, I learned a great deal about the relatively common disease, *Bells Palsy* that afflicts approximately 40,000 Americans yearly. More importantly, I learned exactly how important playing the saxophone really is for me, and in the process might have come up with a temporary solution for anyone else that might have a similar experience.

After a 6-hour stint in the Emergency room of the Hospital, I returned home with a prescription for Steroids, an antibiotic, and artificial tears, with instructions to get lots of rest.

### THE NEXT DAY

For the next day or two, I went through a gamut of emotions. I really did not know what to think, and had no idea what to do about my upcoming gigs. I hoped for a miracle recovery of less than seven days, but realized very soon that the probability of that happening was slim. Both of my attending Physicians had told me that the shortest time they had ever heard of was ten days and they would not count on that. I rested for a day or two and did not worry about it. I had always been a fast healer.

Instead, I worked at the piano on the music for the video and the orchestrations I needed to complete for the *Mediations* concert. In between times I tried to get the mouthpieces completed, and I read about Bells Palsy. Even the mouthpieces presented a challenge because I had to have an eye patch to keep my eye from drying out and my visual perspective was completely different.

Eating and drinking was interesting. I drooled as I drank, and had difficulty chewing hard food because the food would slip to the left side of my mouth and then I could not get it out of that area of my mouth. Besides that, everything tasted funny so I just stuck with soup, drooling or not.

# THE THIRD DAY: OVERLY SENSITIVE HEARING

By the third day of drooling, walking around nauseous because of the medication, and cloudy vision because of the artificial tears, I realized this was not going to have a miracle recovery. Therefore, I made the decision to become pro-active in what I had decided would be my swift recovery.

I searched the internet for both mainstream and alternative treatments that might help speed my recovery. In addition to the medication I was prescribed, I added a B-12 vitamin supplement which two general multi-vitamins. The artificial tears, an eye patch, and sunglasses easily solved my sensitivity to light and the blinking difficulty. My heightened sensitivity to sounds was more difficult to conquer.

I assumed the overly relaxed muscles in and around the

hearing apparatus in my face contributed to the overly sensitive hearing that I was experiencing. Even playing the piano bothered me. Inexpensive "closed" foam earplugs did not work. Sealed earplugs cut down high frequencies, but did little to affect the middle and low frequencies, and the amount of sound transmitted to my ears through my bones seemed to be amplified with fully closed earplugs. This was overly apparent in front of the big band I rehearsed that first week. I tried semi-open plugs designed for air travel, and although these plugs were better for a natural sound, they were not rated for a particular decibel reduction. I found a moderately priced solution in semi-open earplugs that were rated for a decibel reduction of 15 to 35. I ordered several of different ratings and found the plugs rated for a 30-decibal reduction worked great. Even when I am fully recovered I intend to have a variety of rated semi-open plugs available in my case, just in case.

An even better alternative would have been to have a hearing test; a mold taken of my ear and a set of custom earplugs made with the desired decibel reduction rating. This would minimally cost about \$100.00 per set plus the cost of a hearing test. Although I had no reservations about the cost, I could not get the plugs for several weeks. That will be on the agenda once I am fully recovered.

# THE FOURTH DAY: MAKING AN EMBOUCHURE

Having figured out the visual and auditory challenges, I focused my attention on how to make an embouchure. Since my first gigs were on soprano, I worked with only that instrument at first. I tried to play, and failed miserably. I could not make a seal long enough to get much more than a quack, let alone a honk that I had on Saturday morning. In a mirror I watched the drooping left side of my face blow up like a balloon every time I tried to play a note. I could also feel my teeth digging into the left part of my lower lip. I experimented with holding my mouthpiece to one side or the other in my mouth. Held to the right, the good side, was of course fruitless because it made the uncontrolled area of the embouchure even bigger. When I held the mouthpiece to the left, toward the weak side, I was able to hold the air leakage down to a minimum. However, the part of my embouchure between the reed and my teeth on the left side was not able to support the sound. The result was quite a loud squeak. I got the best results by holding the first finger of my right hand up to the left corner of my mouth. With my finger on my mouth I could sustain a C or C# for a short time, but it was not steady or consistent.

I began doing exercises recommended on several internet sites, and adapted them for the purposes of forming a saxophone embouchure. My objective was to improve my condition more quickly, and to retain as much muscle tone as possible for when I fully recovered. To this day, I continue to do the exercises, and believe that it has and will help my condition. It was evident, however, that exercises alone would not get me up and playing in time for a gig in three days.

I began thinking of possible mechanical solutions. I wondered if an orthopedic device existed that could substitute for the muscular control I lacked. Surely, other

windplayers had experienced what I was going through. The internet was not helpful. I found two websites that mentioned musicians that had *Bells Palsy*; a trumpet player named Chase Sanborn and a member of Def Leppard. Neither site offered any information on medical treatments or orthopedic so I went to a medical supply business. I purchased two different strengths of support bandages as well as a sheet of ¼ inch heat sensitive splint material used to make formed splints.

I experimented with wrapping the support bandage around my head and over my cheeks and mouth. I cut a whole in the bandage, inserted my soprano through the hole, and tried to play. Again my cheek and embouchure blew out and I still could not play. Neither of the bandages had enough support to hold my embouchure in place. Since I normally play rather large mouthpiece setups, I even made a mouthpiece with a smaller tip opening and much less resistance, but the bandages still could not hold my embouchure in.

In Part II, I will continue with my experiments at trying to conquer Bells Palsy so I could play the saxophone again. I'll begin with "The Fifth Day: Making A Face Plate" and continue to the 12th day, when things began to change. Photos will be included, as well as my original diagrahm of the mouthpiece to use as a reference for attaching the face plate. I will include a medical summary of the Bells Palsy syndrome, suggested exercies for your face and eye muscles, and conclude with a list of web pages devoted to this disease. §



Making A Face Plate I Could Play Day 6, 50% Recovery Day 10, More Improvement

Day 12, 90% Recovered

The Facts About Bells Palsy Physical Exercise Program Helpful Websites Conclusion

# By Gunnar Mossblad

s I said in Part I (Sept/Oct 2002 Saxophone Jour nal), "For a professional saxophonist, or any windplayer, the embouchure is the most important connection to your instrument. It serves as the seal for the air stream and is the final adjustment for the quality of the tone, pitch, timbre and response of the instrument. Have you ever thought what you would do if you woke up one day and could not form an embouchure? Well, I have not only thought about it, it happened to me."

In Part I of this continueing topic, I discussed the discovery of my having Bells Palsy, and continued with a detailed explanation of how it effected the left side of my face. I also referred to my emergency doctor's visit, a bout with sudden over sensitivity to hearing sound, and my first attempts at making an embouchure. All this took place within the first four days of my experience with Bells Palsy. We begin here with the fifth day.

### THE FIFTH DAY: MAKING A FACE PLATE

It was now two days before I needed to leave for Nashville. I had already warned the bandleader that I might not be able to make it. The bandages were not strong enough, but I hoped the splint material would work. This material, when heated, became pliable. It could be molded to almost any shape. I cut a piece approximately 1.5 inches wide and 3 inches long, cut a hole on the right side of the length that would easily fit my soprano mouthpiece. I blew a hair dryer on it for several minutes to make it pliable. I pushed it against my face in the desired position. It molded to the shape of face, and I held it until it cooled. When cooled, it retained the shape of my embouchure and I drilled small holes at each end to accept a string that would go around my head. When I played, I actually had some success. I sounded a tiny bit better than a duck, but there was too much flex in the material. My embouchure still blew out, and since the hole I made for the mouthpiece was larger than the mouthpiece the plate just slid down the mouth-



BEST FACE PLATE As it appears when playing. Note, I was more than 80% redovered at the time of this

photo.



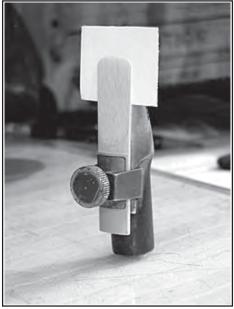
LARGER FACE PLATE As it appears when playing. Note, I was more than 80% redovered at the time of this photo.

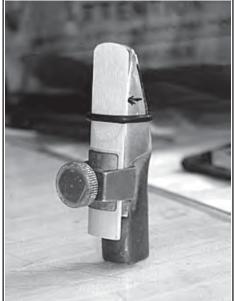
piece, contributing to the loss of control. I realized I had the right idea, but needed a faceplate made out of a material that was more rigid. I also needed to attach it to the mouthpiece so that it would not move around.

The final shape of the splint looked like a large spoon so I rummaged through my camping silverware and found a soupspoon that was approximately the same size. Then I measured and profiled my soprano mouthpiece. I located the bottom of the lay of the mouthpiece, by measuring the opening with my tools, and marked it with a fine-tip marker. (Note: this can also be determined slightly less accurately by putting a reed on your mouthpiece and sliding a piece of paper as far down as possible).

In order to determine the exact opening I measured and diagrammed the shape and dimensions of the mouthpiece at that point. The hole in the spoon needed to be cut to the exact size of the mouthpiece in order to fit the mouthpiece

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# FINDING BOTTOM OF MOUTHPIECELAY

A paper slide, as far down as possible between the reed and the mouthpiece, indicates the bottom of the lay (i.e., where the mouthpiece first pulls away from the reed)

at the bottom of the lay, but no further. With the faceplate in this position, I thought I could push the plate against my embouchure the amount necessary to hold in my substitute for my lost muscular control. If the plate went on the mouthpiece any further, it would cause me to take too much mouthpiece to maintain the pressure. If the plate was on the mouthpiece less or closer to the end of the mouthpiece, it would negatively affect the sound by making the mouthpiece smaller and dampening the

After several hours of carefully drilling, cutting, filing, burnishing, polishing and fitting, I had a new device that fitted the mouthpiece. It only took trying a couple of different

reeds to know that I needed some extra space underneath the mouthpiece so that the plate did not touch the reed. I open the lower part of the opening just a millimeter or two to accommodate different reeds. My preliminary testing seemed comfortable, but when I actually tried to play it, my teeth dug into the flesh of my embouchure. I tried again with some florist tape on my teeth. This helped but did not provide enough protection. By shaping and installing 3/8" thick high compression trailer insulation installed on the inside of the spoon, I had the support and protection I needed.

### I COULD PLAY!

sound.

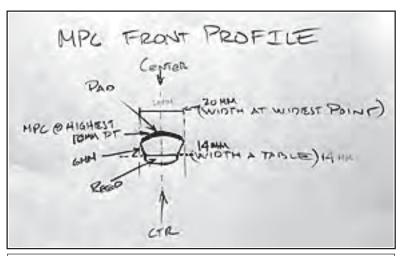
Granted, I still had to figure out how to use the device against my embouchure to play with finesse and control, and I had very little endurance. However, the potential was there. I still looked like a big balloon on the left side of my face, so I tried to find a spoon that went further over on

### MOUTHPIECE WITH O-RING

A common faucet o-ring serves as a fine adjustment for the face plate to be attached.

# MOUTHPIECE WITH FACE PLATE INSTALLED

Face plate is pushed onto the mouthpiece up to the o-ring.



### ORIGINAL DIAGRAHM OF THE MEASUREMENTS

the left side of my face. Good old K-mart had a Martha Stewart Salad server spoon set that was more elongated, like the splint. I bought it, duplicated the mouthpiece opening, but it dampened or muffled the sound much more, and although it held most of my cheek in, air escaped past the plate and it sounded like I was giving someone a raspberry. Therefore, I stuck to the smaller plate.

# THE SIXTH DAY: A 50% RECOVERY

I made a quick trip to my Doctor's office to have him inspect my orthopedic device. This was a regularly scheduled visit, but it was important for me to have him watch me play with the faceplate. When I played I felt quite a bit of pull on the muscles in the left side of my face. Before I used this faceplate too much, I wanted some assurance from the doctor that I was not doing any permanent, or even temporary damage to the muscles. After all, one gig is

not worth my whole career. I left the office feeling much better, he not only thought I had made some remarkable improvement, he assured me that the I was not doing any damage to the facial muscles, and he was rather fascinated with my ingenuity. He is actually the person who encouraged me to write this article. He estimated my recovery rate at 50%. Since I was using the 'playing' standard I gave myself about 35%. Thanks Doc!

I spent the next two hours and the following day just practicing long tones and scales to learn the control necessary to make my gigs. I could not sustain as long a phrase, and on soprano, my normal 3.5 octave range was reduced to 2.5 octaves. I also had a great deal of difficulty playing at softer volumes. This improved over the next day, although my chops really hurt because I could not feel how much I was pressing against my teeth. With the florist tape over my teeth, frequent rests, and some experimenting, I quickly strengthened my embouchure. In fact, by the time I got to Nashville I had graduated from a number 2 (soft) reed to number 3 (hard) reeds, and I made my gig.

I also found that each reed needed the faceplate to be in a slightly different position for the best sound and response. A rubber o-ring normally used in water faucets worked well as a stop for the faceplate, and a fine adjustment for different reeds. By sliding the o-ring slightly up or down the mouthpiece, the faceplate could be put in the optimum position for that reed.

### DAYS SEVEN-NINE:

### I ARRIVED IN NASHVILLE

After a very early flight I arrived in Nashville for the concert/video shoot. I certainly looked a little funny playing, but I must say the results were good. I had not gained all the control that I had wanted, but this was a rock gig so I could play a little louder. I played two, one-hour sets, and came away with just a slightly bloody mouth. (I still could not quite feel how much pressure I was putting on my embouchure). The next two days I rested and hung out in Nashville. When the DVD comes out, I will certainly have some memories.

# THE TENTH DAY: MORE IMPROVEMENT

By the time Tuesday morning rolled around I felt like I had made more improvement. You could still tell that my face drooped, especially when I tried to smile, but I went back to teaching my saxophone students. I did not play as much as usual because of my condition, and had to do a lot more explaining. It was a challenge. Things that I usually made a brief statement and then a demonstration on my instrument, I had to explain verbally. A good exercise for my teaching skills. I did a full day of teaching, and paced my playing since I did not have as much endurance as normal. I felt a little like a lead trumpet player. I carefully planned the amount of practicing and playing I did during a day so that I did not blow my chops out. I made it through the dress rehearsal for my next performance with, what I consider less than a sparkling performance. This piece required much more control and range, but I used the dress to determine what I need to do to have a decent performance.

### THE ELEVENTH DAY

The next performance date arrived. I had recovered some of my muscular control in my face, and I learned how to play with the metal plate. Frankly, I was relatively satisfied. I made my 3.5 octaves on soprano that I needed for the piece, and covered most of my weaknesses.

# THE TWELFTH DAY:

By the time I got to my gig with Dave Liebman I was about 90% recovered, a veteran in facial exercises, and did not need to use the plate (although I still leaked a little). I had to be careful about the length of my phrases, and my endurance was not what it was. In the concert it was obvious to me that I had over-extended my chops in the three-hour rehearsal just before the performance, but I was making progress every day. It's now almost a full month later and I still cannot play quite as long a phrase, and my endurance is not quite back, but I do feel like I am making progress toward a full recovery.

My next goal is a gig a performance of Milhaud's *La Creation du monde*, and a premiere of a new work titled *A Brandenburg for the New Millennium* by the composer Libby Larsen at the Shenandoah Valley Bach Festival. I intend to be back 100%!

I certainly would never wish this on anyone else, but I learned a lot about the importance of playing music. If you, or one of your students, are one of the 40,000 every year to get Bells Palsy, I hope sharing my experience may give you some encouragement or perhaps a way around the inconvenience. I would love to hear about other musicians that have experience with Bells Palsy. Please feel free to contact me.

### THE FACTS ABOUT BELLS PALSY

The following information is based on sources listed at the end of this article. Bell's (or Bells) palsy is generally referred to as a facial palsy or paralysis. It occurs when the 7th cranial nerve, which controls the facial muscles, becomes swollen and inflamed. The result of this inflammation is a temporary paralysis of the face. There are varying degrees of Bells palsy because the 7th cranial nerve is actually a large bundle of individual nerve fibers. These nerve fibers control not only the numerous facial muscles, but also auditory, tear gland and other functions that are centered in the face. It even can affect taste buds. From the brain this bundle of nerve fibers separates or fans out into two groups. One group controls the functions on the left side of the face and the other, the right.

The exact cause of Bells palsy is unknown, although it commonly happens after a trauma to the facial nerve, or when pressure is put on the facial nerve by a tumor. It also has been associated with especially in my area of the Country, Philadelphia, with Lyme disease. Other possibilities include:

- a viral infection, such as viral meningitis
- a flu-like illness
- headaches
- colds
- chronic middle ear infection
- high blood pressure

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- diabetes
- sarcoidosis

Bells palsy usually develops suddenly, over one day. However, there are cases where symptoms take longer to develop perhaps two to five days. Symptoms may include:

- a sudden weakness of one or both sides of the face
- drooping of the eyelid and corner of the mouth
- drooling after brushing the teeth or when drinkin
- excessive tearing in one eye, and the inability to:
- wrinkle the brow
- not being able to close an eyelid
- not being able to smile
- puffing out the cheeks with impaired speech
- facial stiffness or a feeling that your face is being pulled to one side
  - pain behind or in front of your ear on the affected side
  - loss or distortion of taste
  - increased or decreased tearing and saliva production
  - · increased auditory sensitivity and distortion
  - headache

Treatments that may be prescribed for severe cases of Bells palsy include:

- therapy with steroids like Prednisone
- therapy with a hormone called ACTH, which stimulates cortisone production in the body
- surgery to relieve pressure on the nerve, or (uncommon)
  - plastic surgery to reduce deformities. (uncommon)

For some, a home program of physical therapy may help in recovery, and may include application of moist heat to reduce pain, massage with a moisturizer, and facial exercises done while looking in a mirror (see below).

The paralysis produced by Bell's palsy is usually temporary, but can be a permanent condition. The recovery period for 80-90% of the cases is 2-3 weeks. For the remainder of people, a full recovery will take from 6 months up to 2 years. Occasionally only a partial recovery will occur and rarely the condition is permanent. A partial recovery of 80% or more will not usually be noticeable to anyone. Nor will it affect normal facial functions like speech, and facial expressions. Close examination of the face will reveal a few less wrinkles on one side of the face or one eye may be lower or appear smaller than the other one.

For musicians and other professional that use their facial muscles in their art or work, however, a partial recovery can be disastrous because of the fine motor skills necessary to form and maintain an embouchure. For example, when I had recovered what I estimated to be 80-85%, although I looked normal, I could not sustain as long a phrase as I had been able to do before the Palsy. I also had difficulty producing the upper end of the third and all of fourth octave of the saxophone. My tone was not as consistent, and I had difficulty controlling the pitch. How much was non-recovery and how much was atrophy of the muscles, am not sure.

In about ten percent of the people who develop Bells palsy, the disorder comes back again. The most serious complication that may happen with Bells palsy is the inability to close the eyelid. Other complications of Bells palsy may be due to incomplete recovery of the facial nerve, which may result in:

- tearing while chewing
- blinking when trying to smile
- twitching or facial spasms
- nasal obstruction, which could cause difficulty breathing through the nose

In most cases, Bells palsy cannot be prevented because doctors really do not know what causes it. However, in those cases when the Palsy is triggered by a specific trauma to the nerve then preventative measures may of course be taken to prevent a similar episode.

### EXERCISES FOR BELL'S PALSY

Using general principles of embouchure development and several of the web sites listed below, I developed and followed the following exercise program. It should be noted that even with an intense exercise program as described, I experienced a lot of muscular atrophy once I began maintaining a practice and performance schedule. Not only was my endurance way down, I needed to be very careful not to over compensate with the unaffected side of my face. I needed to concentrate using the muscles of both sides of my face equally. Although I do not face scientific proof, I believe these exercises aided in what my doctor believed to be a remarkable recovery. Even with a full recovery, I find these exercises to help keep my chops in shape.

Doing the exercises in front of a mirror is important no matter how discouraging it is at first. Following standard exercise procedures, I completed all the exercises three times per day, morning, afternoon and evening. During each exercise period, I completed two sets of 8-10 repetitions for each exercise. After attempting to do the exercise using only my muscles, I assisted the paralyzed muscles with my hand/fingers to match what I was able to do on the unaffected side of my face. This kept muscular flexibility and range or motion. In between the sets I stretched or gently massaged my face. Depending on the speed I did each exercise the routine could take 10-20 minutes.

The exercises listed here are specifically for the embouchure/mouth area. For other exercises, I suggest the Massachusetts General Hospital Neurology Web forum.

### For The Corners Of The Mouth

Do two sets of 8-10 repetitions, and assist paralyzed side of face with fingers. Try to hold the exercise at the extreme for at least 3-5 seconds.

### "Toothy" Smile

Pull both corners of the mouth up and out with the teeth parted slightly (showing teeth)

### **Toothless Smile**

Pull both corners of the mouth up as high as possible with the teeth clenched. (Without showing any teeth).

### Open Frown

Pull corners down and out to the side. (Flex or bulge the muscles in the neck).

### **Closed Frown**

Pull corners of mouth down and in toward teeth. (Make dimples in your cheeks).

Complete each of the above exercises again with only one corner at a time.

### For The Upper Lip

Do two sets of 8-10 repetitions, and assist paralyzed side of face with fingers. Try to hold the exercise at the extreme for at least 3-5 seconds.

### Snarl

Lift the upper lip and show the upper teeth (growl, wrinkle your nose or squint your eyes)

### Roll Upper Lip In

Lower the upper lip over the upper teeth (try to do a double reed embouchure)

**Do Exercise #1** again with only one side of the upper lip at a time.

### For The Lower Lip

Do two sets of 8-10 repetitions, and assist paralyzed side of face with fingers. Try to hold the exercise at the extreme for at least 3-5 seconds.

### Pout

Bunch up the chin rolling the lower lip out as far as possible (note--the ability to roll out the lower lip is hereditary, some people may not be able to roll the lip out. Those that cannot should concentrate on bunching the chin and assist the lip with your finger.

### Roll Lower Lip Out

Lower the upper lip over the upper teeth (try to do a double reed embouchure)

### For Full Embouchure Muscle

Do two sets of 8-10 repetitions, and assist paralyzed side of face with fingers. Try to hold the exercise at the extreme for at least 3-5 seconds.

### **Puff Cheeks**

Squeeze/hold your lips together tightly, fill your cheeks with air and try not to leak air.

### **Pull Button**

Put a large button on a string. Place it under your lips. Pull the string. Try to hold it with your lips.

### **Drawstring Your Mouth**

Starting with a medium to large tube (similar to the cardboard tube found inside a roll paper towels) close your embouchure evenly around the tube like a drawstring on a bag or the way a camera lens closes. As your embouchure improves, use increasingly smaller tubes until you can close your embouchure around your little finger.

### Do Exercise #1

again shifting the air from the Left to right cheek

### Do Exercise #2

again shifting the button from the Left to right side

### CONCLUSION

For whatever it is worth, at this writing it has been 5 ½ months since I first encountered Bells Palsy, and I finally feel fully recovered. I worked very hard at it, and I was lucky. I think a combination of things came together to help me recover quickly. My doctor began immediate treatment with antibiotics, and steroids (Prednisone). I was motivated to recover because of my performing commitments. The exercises seemed to help with atrophy and perhaps even to stimulate the cranial nerve again. Finally, something that my research indicated was not suppose to help, appeared to make a difference for me. When I had recovered about 80-85% of my function, I reached a plateau, and made no recovery for a long time. Just about the time I had resigned myself to an 80% recovery, I had a severe allergy attack. My doctor again prescribed steroids (Prednisone). Within 24 hours of starting the  $2^{\rm nd}$  prescription of steroids, I made significant improvement. By the time I had finished the prescription, I was at a full recovery with just some atrophy. I cannot say for sure that the second dose of steroids helped, but it sure appeared to. Perhaps this is something for the medical community to research.

I hope these two articles on my experience with Bells Palsy helps someone else. Part I, titled *Overcoming Bells Palsy, Part I: The First 4 Days* was published in the Sept/Oct 2002 Saxophone Journal (Volume 27, No. 1). §

### EDITOR'S NOTE

With Gunnar Mossblad's permission we have decided to make these two articles on Bells Palsy available to the general public on our website. The medical implications are such that we feel it is important to get the information out there, and hopefully we can help someone else who may be experiencing Bells Palsy.

We thank Gunnar for his curageous contribution to Saxophone Journal, and we are happy to report that Gunnar is playing saxophone again and enjoying a renewed career. The 2-part series on Bells Palsy are at:

www.dornpub.com/saxophonejournal.html

### **BELLS PALSY SOURCES & WEBSITES**

The American Medical Association Family Medical Guide, 3<sup>rd</sup> Edition

- www.medical-library.org/journals/treatment/peripheral\_neurop/1\_bells\_palsy.htm
- $\bullet www.medifocus1.com/guide\_detail.asp?gid=TL003\&a=a\&assoc=GoTo\&keyword=bellpalsyngering for the property of the property of$
- www.bellspalsy.net/
- www.bellspalsy.com/
- www.bellspalsy.ws/
- www.mayoclinic.com/findinformation/diseasesandconditions/invoke.cfm?id=DS00168&
- www.ninds.nih.gov/health\_and\_medical/disorders/bells\_doc.htm
- http://neuro-www.mgh.harvard.edu/forum\_2/BellsPalsyF/1.13.004.52AMBELLSPALSYEX.html
- http://neuro-www.mgh.harvard.edu/forum\_2/BellsPalsyF/1.12.0011.23PMfacialexerc.html
- ${\color{gray}\bullet}\ www.acupuncture.com/Acup/bells.htm$
- ${\color{gray}\bullet} www.entnet.org/healthinfo/topics/bells.cfm$
- www.viahealth.org/disease/nervoussystemdisorders/bells.htm

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