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Submitted 4/27/16
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NeuroLumen Case Studies

- 1. 27 year old right handed baseball pitcher. Came in for treatment for right shoulder, triceps and elbow soreness after throwing a 9 inning game on 3/19/16. Athlete averages 108-116 pitches every time he throw which is usually on a Friday. Athlete comes in from treatments on Monday which typically involve e-stim/ ultrasound and or deep tissue manual therapy. Treatment is then progressed till Friday with a combination of thera-band exercises, running, weighted ball program, body blade and plyometrics. Typically after throwing athlete will use bands to decelerate after pitching with throwing motion body blade movement and ice. Saturday will use body blade exercises and run and follow up with game ready ice machine. Athlete will begin using NeuroLumen on 3/21/16 (Ist treatment) in place of typical Monday treatment and will use it again on Thursday before throwing on Friday.
 - a. !st Treatment- on 3/22/16 after first treatment athlete reported today that his shoulder, triceps and elbow soreness was
 qone today and his arm felt much better than it usually does after pitching.
 - b. 2nd Treatment- Began on 3/24/16 the day before the game. Athlete then pitched on 3/25/16 with decreased reported fatigue and soreness associated during the game. Athlete claims his arm did not fatigue as quickly as it usually did
- 2. 22 year old baseball player, whose position is short stop, uses NeuroLumen for the first time on 3/21/16 following a quadriceps strain on 3/14/16. To this date athlete has been working with his athletic trainer on strength, range of motion and flexibility. Athlete has not been able to return to play but has made significant improvement. Athlete has been using a combination of ultrasound, e-stim/ultrasound and phonophoresis. Athlete has been able to hit during batting practice and light jog and begin moving side to side in his position to this date. Athlete will continue work with athletic trainer on strength and flexibility with NeuroLumen to start therapy and then perform exercises.
 - a. 2nd Treatment- Began after practice on 3/21/16. Athlete claimed that he was feeling better and able to move around better today and was able to do more in practice than yesterday. Reported on 3/22/16 he was feeling much better today. Not as sore as usual
 - b. 3rd Treatment- Began after being able to play in a baseball game in which he played 5 innings. Athlete was able to push off and make lateral movements but was unable to fully run the bases. Athlete claims that his leg is feeling much better from the first treatment to the 3rd. Athletes 3rd treatment was directly after baseball game ended.
 - c. 4th and 5th Treatment- Began 3/23-3/24 directly after practice. After treatments were over on 3/25/16 athlete was able to participate in a whole 9 inning game with some soreness noted but claimed his leg felt like it was getting much better. Athlete discontinued using the NeuroLumen due to him feeling like he did not need any further treatment then daily stretching before the game.
- 3. 19 year old track cross country runner came to the athletic training room in January before indoor track season started. Athlete claimed that she was primarily running on the treadmill back home and came back to run with the track team and was primarily on the pavement. Athlete started experiencing IT band tightness and was working with the athletic trainer on stretching, strengthening, E-stim/ultrasound and Graston. Athlete was able to continue to run until IT band tightness increased to the point of unable to run. Athlete was discontinued with running and treatment and slowly working back into activities. Athlete claims that she was getting better with exercises and stretching until recently. Today is the first day of NeuroLumen treatment.

- a. 2nd Treatment- After first treatment athlete claimed that her IT band felt much looser today. Athlete performed her first treatment after practice on 3/21/16 and for her second treatment she will do it before practice on 3/22/16.
- 4. 22 yr old women's golfer reported to the ATR on 2/5/16 c/o bilateral thoracospinal pain (but predominantly on her L side) that she claims had increased due to team workouts. Athlete was diagnosed w/ rheumatoid arthritis last year and c/o of systemic joint pain and has to have routine injections. She was consistent with core stability training and corrective exercises for ~3-4 weeks post-initial injury date. Has been inconsistent since then. 2-3 weeks ago she stepped in a hole on a golf course and injured her R foot. She was subsequently placed in a walking boot due to p!/discomfort w/ WB. Today we began NeuroLumen treatment on both her upper back (R & L) as well as on her R foot. Athlete claimed initially that she could feel a difference in her R foot (stating "she has no pain") but did not notice a difference in her upper back.
 - a. 2nd treatment (3/23/16) She reported back this AM reporting her foot felt "much better, no pain" but reported no difference in her back after 1st treatment. After 2nd treatment this morning, she stated her back felt "really good" (which she hasn't said since we began rehab she would state that it would feel better after weeks of consistent therapy) and her foot felt "even better than yesterday w/ no pain."
 - b. 3rd treatment (3/24/16) She reported to the ATR again this AM reporting her foot felt "really good, no pain." Stated her back felt "good, no worse than yesterday."
 - c. Athlete has not used NeuroLumen since 3/24/16 and has c/o a return of symptoms in her back and in her foot.
- 5. 19 year old football player reported to the ATR on 2/23/16 complaining of lower back pain (predominantly on his L side) associated with heavy lifting during weight program. Athlete has not experienced lower back pain like this before and was removed from heavy spine loading activities that increased pain in which he tried using a Tens unit to relieve symptoms and claimed it helped a little but her still was having pain. Athlete presented beginning signs and symptoms of compression injury to L4/L5. Athlete was able to resume practice but started a stretching program over the week on 3/12/16-3/20/16 where he reported on 3/21/16 that his back was feeling better but still had the pain. Athlete began core stabilization program with athletic trainer and had his first NeuroLumen treatment on 3/21/16 where he reported on 3/22/16 that he was able to sleep at night for the first time in several weeks and his back was feeling better and he noticed a difference in activities and movement.
 - a. 2nd Treatment- Began on 3/24/16 following a exercise session with the athletic trainer. Athlete claimed that he felt like he was cetting better and his pain was decreasing and noticed he was able to do more than what he could before
 - b. 3rd Treatment- Began on 3/28/16. Athlete claimed that he is having little to no pain in his lower back and is able to stretch and move around better than what he did before injury in the weight room. Athlete continues to work on core stabilization. Athlete claims" I love this machine, it made my back feel way better a lot sooner than I thought".
 - c. 4th treatment- Began on 3/30/16 when athlete who we have been treating with NeuroLumen, stretching and strengthening exercises, came to be hooked up on the machine again. Athlete claims that his back is feeling better than normal and he has been looking forward to using the NeuroLumen all day. Athlete did perform a twisting abdominal exercise that caused him some pain during weights after knowing that he shouldn't have performed the exercise but did claim that after the treatment his back was feeling like it did before he performed the exercise. After following up with the athlete later that evening he claimed that he was back to normal before the exercise and wanted to emphasis that he has been sleeping with no back pain since first treatment.
- 6. 21 year old left handed baseball pitcher reported on 3/26/16 that he was having some elbow soreness associated with throwing his curve ball and change up. Athlete was evaluated and did not present any UCL injury. Athlete claims that during high school he had a similar incident where his elbow became inflamed and had to sit for 3 months. Athlete's pain/soreness on 3/28/16 were less than on 3/26/16 but he still had some soreness. Athlete did not throw on this day or work out to further rest his arm. Athlete used the NeuroLumen for the first time. After following up with athlete on 3/29/16 at the game he claimed that his elbow was still a little sore but he could tell a difference in how it felt now compared to how it felt before.
 - a. Update- 4/1/16 athlete is still experiencing some soreness but claims it is much better but he still feels it.

- 7. 25 year old right handed baseball pitcher came into the ATR for normal monday treatment of his arm which would include stripping the muscles and loosening up soreness and areas of tension. Athlete combines this with RTC strength and throwing program all in preparation for pitching either that tuesday or during the weekend. Athlete has several areas of tension which included his upper back where adhesions were felt, shoulder which general soreness is noted after throwing, and bicep which tightness up after throwing due to certain pitches he throws. Athlete received manual therapy from the athletic trainer and then did a few RTC exercises then used the NeuroLumen for the first time on his back, shoulder and bicep. After using athlete claimed his arm felt better than what it usually does and can not wait to see how he performs when throwing on 3/29/16. Athlete threw on 3/29/16 and claimed that his arm felt great and did not have the usual nagging soreness that comes after throwing.
- 8. 20 year old football defensive linemen came into the ATR on 3/30/16 complaining of increased soreness with his left wrist. Athlete has had 3 different surgeries for this scaphoid to repair the broken bone. On the 3rd surgery he was instructed to come back to football as tolerated and to work with ATC on range of motion and strengthening along with taping/splinting his wrist for further protection. Athlete has been working on strengthen and range of motion along with taping but has reported soreness that keeps increasing after each practice. Athlete used the NeuroLumen for the first time on 3/30/16 to see if that would help with his pain.
 - a. Update- Athlete claims that his "wrist actually feels way better " after using the NeuoLumen for only one time. Athlete would continue to use machine if available