Physiatrist's Voice

NEWSLETTER JUNE 2021

Enhancing Health And Function Through Education And Research In The Field Of Physical Medicine And Rehabilitation

In this Issue

PRESIDENT'S MESSAGE

Mark Rubenstein, M.D.
President, FSPMR

Bravado or Boredom? Cynicism or Science? Idiocy or Integrity?

I asked myself the questions above last weekend, clearly in a rhetorical fashion. The Florida Medical Association elected to have our first face-to-face Board of Governors (BOG) Meeting in well more than a year due to COVID-19. All of us have had the opportunity to be vaccinated, and the State of Florida is clearly "opening up," for better or worse. Personally I debated attending virtually, but not because of COVID. I had a family milestone that needed to be recognized, and it was more important to be with them. When I initially told my wife about the meeting, she was somewhat dismayed that I considered attending. Yet when it came down to making a decision, it was she who insisted that we all go. It was time for a change of scenery.

The Board Meeting was held in Sarasota. It had been planned for 2 years (meetings planned far in advance). I arrived to find that almost NO ONE was wearing a mask in the hotel. When we took a walk into town from the hotel after the first two meetings were held Friday afternoon and evening, we found the area bustling with full restaurants, clubs, bars, and even ice cream stores. People were standing shoulder to shoulder with no masks. Times certainly are changing.

When I attend a BOG meeting, the weekend is filled with different committees and responsibilities. It was refreshing to attend a meeting with our peers. Reports by various individuals were enlightening and educational. I decided that the most appropriate area to cover for this newsletter was a summary of some of the most salient points made during the weekend.

The State Surgeon General, Dr. Scott Rivkees, has a position on the FMA Board. He is gracious to attend the meetings and give thorough reports, and he advised that the demographics of COVID now show primarily younger people with active infections. As of the weekend of 5/22/21, 84% of the population in Florida over the age of 65 had been vaccinated. This is resulted in a measurable decrease in number of cases, hospitalizations, and deaths in nursing homes, assisted living facilities, etc. As of Week 22 of vaccinations, 17 million doses in Florida had been given, which translated to more than 10 million people with at least one dose. What was somewhat shocking to me was that only 58% of hospital workers had been vaccinated and only approximately 50% of physicians likewise, despite the fact that this population had access to the vaccine. Work still needs to be done in this arena.

The FMA BOG also contains a representative from the Board of Medicine. Interesting and pertinent findings from his report included that the BOM will continue a reduction of license renewal fees for next cycle ($250/year instead of $395). One of the areas that the BOM addressed at their most recent meeting was standards for office surgery. This may affect some of our members as the Board concluded that some offices should be considered Ambulatory Surgery Centers. Inspections of Ambulatory Surgery Centers will be required prior to initiation of use of the operating rooms in those facilities. The BOM is also passing rules which pertain to whether or not physicians can treat their own family members or themselves, and they plan to follow Federation of State Medical Board Guidelines. Stay tuned for rule changes that may affect some physiatrists in the state.

An interesting and provocative presentation was made by one of the Deans of the Florida Medical Schools. The Dean's report discussed the transition to on-line learning, residency interviews, medical school interviews, etc. Competition for graduate medical education positions in Florida is much like the rest of the country. For example, USF received 6400 applications for 170 slots. The report of the Dean was interesting and covered topics such as GME opportunities in the state, the pelvic exam bill and relationship to students/residents/physicians, and protecting DNA privacy. What I found shocking is that there are only 10 addiction medicine specialists in the State of Florida!

PRESIDENT'S MESSAGE—CONTINUED

A federal legislative update was provided. I'm going to share an article written by our Advocacy and Legislative Specialist from the FMA with the FSPMR Board, but will be happy to forward to members of the FSPMR if they are interested. Salient points include that a 2% sequestration Medicare Cut is planned, followed by a 4% reimbursement cut in 2022, and then a 3.75% Medicare payment cut in 2022. This means a 9.75% cumulative cut effective 1/1/22 unless Congress takes action (which in some form or another is likely).

The legislative update included information on telehealth. Audio only telehealth visits will be ceased at the end of the current emergency legislation. Some insurers do not want to continue to reimburse telehealth at the same rate as face-to-face visits, and therefore have claimed that insurance premiums will sky-rocket if they allow telehealth indefinitely.

Speaking of telehealth, we have been asked whether controlled substances can be provided thru telehealth. The State Surgeon General passed an Executive Order which allows controlled substances to be prescribed to patients "seen" thru telehealth, but only as long as the Governor's Protective Order and the Executive Order of the Governor or Surgeon General remains in effect. As of the time of this article draft, that order is still in effect.

The State Legislature recently completed the 2021 Legislative Session. Lobbyists and organizations faced additional challenges navigating the landscape due to COVID. The Senate "locked down" and meetings in offices did not occur. Telephonic meetings, ZOOM, and other virtual platforms were used. Interestingly, the House did allow face to face meetings. As usual, there were a number of alarming bills that required interested parties to protect the field of medicine. Organized medicine was successful in adding an electronic notification option for reviewing "non-opioid alternatives" with patients that has become statute in Florida. Scope of practice expansion was, as usual, one of our biggest concerns. The Physician Assistant Autonomous practice was a major concern, and the legislators essentially negated that bill. As a concession, the number of physician assistants a physician can supervise at one time has increased. Nurse practitioners sought to have "specialties" with independent practice, and this bill was also negated. Other scope of practice expansion attempts such as optometrists performing laser surgery, psychologists prescribing controlled substances, and audiologists expanding their prescribing spectrum were all negated in some fashion.

PRESIDENT'S MESSAGE—CONTINUED

The legislature passed a "Parents Bill of Rights." This bill has unintended consequences. It included the need for parental written consent before any child can be treated, even in an urgent situation. This is the rule that we appealed to the state to modify as it will limit physicians' ability to be team physicians or render first aid at an acute incident involving a minor. Recently the FMA crafted a letter to the Governor requesting that he veto the bill. FSPMR signed onto the letter once we made multiple enhancements to it.

One of the bills that passed will potentially affect many physiatrists. This is the elimination of PIP. The bill, in its current state, would mandate bodily injury coverage. While lawyers and many orthopedic surgeons and interested parties are concerned with regard to this bill, the Governor has NOT yet signed it (at least as of the end of May when I am drafting this letter). In other words, stay tuned.

NICA is an issue that many of you probably don't realize results in heated discussions every year. Licensed physicians in Florida who do not practice obstetrics must pay a yearly fee of $250 towards NICA. The fund has a significant amount of money, and yearly there are those who feel we should not pay anything further towards this. Legislation this year considered increasing the basic benefit that NICA pays to "injured" parties. The bill started to spiral out of control and would have resulted in much LARGER premiums on a yearly basis for physicians. The bill was modified and passed with limited ramifications to the average physician.

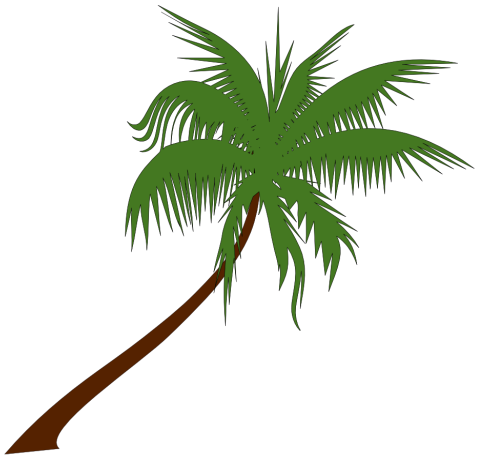
Telehealth was discussed at length at the legislative level. One issue is telehealth parity. Currently insurance companies are supposed to reimburse a telehealth visit on par with a non-telemedicine visit. Companies are lobbying to reduce the amount reimbursed for telemedicine visits. A second issue with telemedicine/telehealth is actually the controlled substance prescribing. Legislators appear amenable to allowing Schedule III, IV, and V substances to be prescribed by telehealth. It is the Schedule II's where there is continued debate. Currently the State Surgeon General's Executive Order allows physicians to prescribe, when necessary, Schedule II's with a telemedicine visit. This will potentially no longer be permitted when the executive order expires.

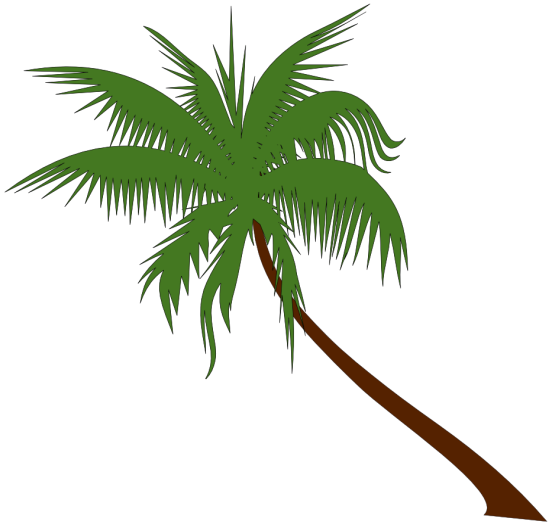
PRESIDENT'S MESSAGE—CONTINUED

Legislators appear concerned and consumed with potential re-districting. Politicians need to appear to their base. Many of them face a potential change in their district which could presumably and likely influence their ability to be re-elected.

Senate Bill 2006 is an emergency management bill that was recently signed into law by Gov. DeSantis. This prohibits business entities, governmental entities, and educational institutions in Florida from requiring proof of COVID-19 vaccination in certain situations. This is commonly referred to as the "vaccine passport ban." The bill states that any business operating in Florida "may not require patrons or customers to provide any documentation certifying COVID-19 vaccination or post-infection recovery to gain access to, entry upon, or service from the business operations in this state." Physicians should note that this provision does NOT apply to them or their practices. The bill specifically exempts healthcare providers form the vaccine passport ban. Therefore, physicians and hospitals can continue to adopt vaccination policies that are best suited for their individual situations.

The practice of medicine is continuously evolving. As physicians we are charged with providing high quality care. It means we must be active participants for life-long learning and education. Today's society also requires that we have expertise in technology, and unfortunately for many also knowledge of the legislative process and its effect on our professional careers. We will do our best as a specialty society to keep you informed. In the meantime, be vigilant, be committed, and be dedicated. Our future as a profession depends on it.





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FSPMR Annual Meeting Coming Up in August!

FSPMR's Annual Meeting, in conjunction with the Florida Society of Interventional Pain Physicians, will be held live with some virtual aspects, August 12 – 15, 2021, at the JW Marriott Tampa Water Street. A big thank you to Dr. Andrew Sherman, FSPMR VP and this year's PM&R Program Chair, and to the Program Committee (Drs. Colleen Zittel, Jay Wright, and Bella Chokshi), who have put together a terrific Saturday, August 14, program for physiatrists. See the FSPMR Breakout program agenda following this article.

Dr. Sherman has also developed ***FSPMR's First Annual Recruitment for Physiatry Event***, a Zoom event, Thursday, August 12, 2021, 6:00 – 7:00 PMish, sponsored by Farr Healthcare Inc. Please see the full-page description in this issue, which includes the registration link.

Thank you to Medtronic, sponsor of FSPMR's Annual Business Meeting and Dinner that Saturday evening, August 14, a live event. **There is no charge to attend this event, but you do need to RSVP to FSPMR Executive Director, Lorry Davis, lorry4@earthlink.net, 904 994 6944, if you plan to attend.**

For Conference Registration, click HERE.

For Hotel Registration, click HERE.

For Complete Program Agenda, click HERE.

Find all up to the minute Event information on the FSPMR/EVENTS webpage

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Florida Society of Physical Medicine and Rehabilitation Breakout
Saturday, August 14, 2021 – 5.5 Hours
Course Moderator: Mark Rubenstein MD

8:30 – 9:15 AM	***Challenges and Opportunities for Inpatient Rehabilitation Medicine - Looking Back at 2020 and Looking Forward to the Future*** **Kenneth Ngo MD**, FAAPM&R Medical Director, Brain Injury Program Medical Director, Brooks Rehabilitation Hospital Jacksonville FL
9:15 – 10:00 AM	***A Unique 30-Year PM&R History*** **Craig H Lichtblau MD** Craig H Lichtblau MD PA North Palm Beach FL
10:00 – 10:30 AM	BREAK with Exhibitors
10:30 – 11:00 AM	***Pelvic Rehabilitation*** **Allyson A Shrikhande MD** CMO Pelvic Rehabilitation Medicine New York NY
11:00 AM – 12:00 PM	***KEYNOTE: Healthcare Disparity in PM&R*** **Maurice G Sholas MD PhD** Sholas Medical Consulting LLC New Orleans LA
12:00 – 1:00 PM	LUNCH
1:00 – 1:30 PM	***Brain Injury Medicine Updates: PM&R Perspective on Research and Management*** **Bella Chokshi DO** St Mary's Medical Center Palm Beach Health Network West Palm Beach FL

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Thank you to Medtronic for Sponsoring this year's Annual Business Meeting and Dinner.

FSPMR Breakout—continued

PM&R RESIDENT CASE PRESENTATIONS

1:30 – 1:45 PM	***Burn Rehabilitation and Considerations*** University of South Florida **Jonas Santos DO PGY4** Tampa FL
1:45 – 2:00 PM	***Neuropathic Pain in Multiple Sclerosis: Response to Intrathecal vs. Epidural Opioid Administration*** Larkin Community Hospital **Mario Paese DO PGY3** and **Richard Morgan DO PGY3** South Miami and Hialeah FL
2:00 – 2:15 PM	***CRPS: Pain Management in a Pediatric Patient*** University of Miami **Cristina Brea MD PGY4** and **Edwin Amirianfar DO PGY3** Miami FL
2:15 – 2:30 PM	***Utilization of Spinal Cord Stimulation in a Patient with Bilateral Meralgia Paresthetica*** Memorial Healthcare System **Andres Gutierrez MD PGY3** and **Robert Mousselli DO PGY3** Hollywood FL
2:30 – 3:00 PM	Q&A for All Resident Case Presentations with Expert Panel **Colleen M Zittel MD** Orlando Health Jewett Orthopedic Institute Lake Mary FL **Diana A Hussain MD** Orlando Health Physical Medicine and Rehabilitation Orlando FL
3:00 – 3:30 PM	BREAK with Exhibitors
3:30 – 4:00 PM	***Multidisciplinary Management of Spasticity in the Pediatric Population*** **Joslyn Gober DO** Assistant Professor Medical Director of Pediatric Rehabilitation Medicine Department of Physical Medicine and Rehabilitation University of Miami Miller School of Medicine Miami FL

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FSPMR Keynote: Healthcare Disparity in PM&R

Facebook: /Doc Mo Sho
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Twitter: @DocMoSho
Website: www.DocMoSho.com

Maurice G. Sholas, MD, PhD

BioSketch

Dr. Maurice Sholas is the Principal for Sholas Medical Consulting, LLC. In this capacity, he solves operational challenges for individual practitioners, hospitals and health care agencies. In additional he is a subject matter expert on children with special health care needs. He previously served as a Senior Medical Director for multiple Children's Hospitals and has founded multiple programs in Pediatric Rehabilitation Medicine. Dr. Sholas' work, whether clinical or administrative, is focused on optimizing function and advocating for the marginalized.

Dr. Sholas was born in Baton Rouge, Louisiana. He has traveled the country gathering the educational tools needed for a career that serves children with congenital and acquired physical disabilities as a specialist in Pediatric Rehabilitation Medicine. For college, he attend Southern University in Baton Rouge; majoring in Biology with an emphasis in Spanish. The skill set acquired through school and research activities during the summers, allowed a smooth transition to the MD-PhD Program at Harvard Medical School. In addition to Medical Education, this program allowed Dr. Sholas to receive a terminal degree in the study of Neuroscience. Next, graduate medical education was completed in Physical Medicine and Rehabilitation at the University of Texas Health Science Center at San Antonio. Subspecialty training at the Rehabilitation Institute of Chicago (Shirley Ryan Ability Lab) in Pediatric Rehabilitation Medicine followed. Concurrent with decades of clinical practice, Dr. Sholas founded Sholas Medical Consulting, LLC.

Dr. Sholas' pursuit of intellectual achievement is matched only by his pursuit of advocacy. He feels strongly that every segment of the population has a contribution to make. He is a prestigious Robert Wood Johnson Foundation Clinical Scholar. Only through advocacy and inclusion can the many voices be heard, consensus reached, and true democracy flourish. He embodies the belief that being a good citizen is a prerequisite to being a great physician/executive.

FLORIDA SOCIETY OF PHYSICAL MEDICINE AND REHABILITATION

TO PROMOTE AND ADVANCE HEALTH AND FUNCTION THROUGH EDUCATION AND RESEARCH IN THE FIELD OF PHYSICAL MEDICINE AND REHABILITATION.

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*Recruitment Tips for Success in the Practice Search Process
*Florida Practice Opportunities
*Opportunity for Individual Follow-Up
*Registration:
Please complete all questions for best results!

August 12 , 6 - 7 PMish
FSPM&R Networking event via Zoom during the FSIPP/FSPMR meeting
Free Registration

REGISTER NOW

Florida Society of Interventional Pain Physicians
Florida Society Physical Medicine & Rehabilitation
August 12-15, 2021
The JW Marriott Tampa Water Street Hotel
Tampa, Florida

CALL FOR ABSTRACTS

Submission Deadline: July 10, 2021

The Planning Committee for the Florida Society of Interventional Pain Physicians Annual Meeting invites you to submit abstracts for papers to be presented at the upcoming conference at The JW Marriot Tampa Water Street Hotel, Tampa, Florida. Abstracts should describe original research in the field of pain management. We welcome residents and fellows to submit abstracts as well.

General Information:

The Florida Society of Interventional Pain Physicians together with the Florida Society Physical Medicine and Rehabilitation has reserved time on the program for scientific poster sessions. ePosters will be available for viewing throughout the entirety of the conference. You are welcome and encouraged to bring handouts.

Paper abstracts previously presented or published may not be submitted without modifications, Original work must be changed or expanded, resulting in a new abstract.

The Planning Committee will retain the copyright of the published abstracts. Awards will be presented to the top poster presenters.

For Submission Information, Policy on Commercial Support, Selection Criteria, Meeting Registration Guideline for Poster Winners, Abstract Submission Form, please go to https://www.fspmr.org/2021conf/FSIPP.FSPMR.CallForAbstracts.2021.pdf. Thank you!

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CEREBRAL PALSY

Craig H. Lichtblau, M.D.

Cerebral Palsy is a group of permanent movement disorders that appear in early childhood. Signs and symptoms vary amongst the people and over time. Often, symptoms include poor coordination, stiff muscles, weak muscles and tremors. There may problems with sensation, hearing, swallowing and speaking. Other symptoms include seizures, problems with thinking and reasoning which can occur in one-third of people with Cerebral Palsy. Symptoms may get noticeable over the first few years of life. Underlying problems do not worsen over time.

Cerebral Palsy is caused by abnormal development or damaged parts of the brain that control movement, balance and posture. Most often, problems occur during pregnancy; however, they may also occur during childbirth or shortly after the childbirth. Often, the cause is unknown. **Risk factors include:** Pre-term birth, being a twin, certain infections during pregnancy such as toxoplasmosis, Rubella, exposure to methyl mercury, difficult delivery and/or head trauma during the first few years of life. About 2% of the cases are believed to be due to an inherited genetic cause.

A number of sub-types are classified based on the specific problems present. Patients with stiff muscles have a diagnosis of Spastic Cerebral Palsy. Those with poor coordination and locomotion have Ataxic Cerebral Palsy and those with writhing movements have Dyskinetic Cerebral Palsy.

Diagnosis based on a child's development over time, blood tests and other medical imaging may be used to rule out other possible causes. There is no cure for Cerebral Palsy; however, supportive treatments, medications and surgery may help manage many individuals with disabilities. Cerebral Palsy is the most common movement disorder in children and it occurs in about 2.1 per 1,000 live births. Extensive study of the condition began in the 19th century by William John Little after whose spastic diplegia was called Little's Disease.

Signs and Symptoms:

Cerebral Palsy is defined as a group of permanent disorders of the development, movement and posture causing activity limitations that are attributed to non-progressive disturbances that occurred in the developing fetal or infant brain. While movement problems are the central feature of Cerebral Palsy, difficulty with thinking, learning, feeling, communication and behavior often co-occur with 28% having epilepsy, 58% have difficulties with communication, at least 42% have problems with their vision and 23-56% have learning disabilities.

CEREBRAL PALSY – continued

Cerebral Palsy is characterized by abnormal muscle tone, flexes or motor development and conditions. The neurologic lesion is primary and permanent with orthopedic manifestations which are secondary and progressive. In Cerebral Palsy unequal growth between muscle, tendon units and bone eventually leads to bone and joint deformity. Joint deformities include: contractures causing increased gait difficulties in the form of tip-toeing gait due to tightness of the Achilles tendon and scissoring gait due to tightness of the hip adductors. Gait patterns are among the most common gait abnormalities in children with Cerebral Palsy.

Orthopedic manifestations in Cerebral Palsy are diverse such as crouch gait and excessive knee flexion gait are prevalent among children who possess the ability to walk. Although most people with Cerebral Palsy have problems with increased muscle tone, some have normal or low muscle tone. High muscle tone can either be due to spasticity or dystonia.

Babies born with severe Cerebral Palsy often have an irregular posture. Their bodies may be either very floppy or very stiff. Birth defects such as spinal curvature, a small jaw bone or a small head sometimes occur along with Cerebral Palsy. Symptoms may appear or change as the child gets older. Babies born with Cerebral Palsy do not immediately present with symptoms.

Classically, Cerebral Palsy becomes evident when the baby reaches developmental stages at six to nine months and is starting to mobilize, where preferential use of limbs, asymmetry and gross motor development delay is seen. Drooling is common among children with Cerebral Palsy which can have a variety of impacts including social rejections, impaired speaking, damage to clothing and books, and mouth infections. An average of 55.5% of people with Cerebral Palsy experience lower urinary tract symptoms more commonly excessive storage issues than voiding issues in public for over-contractility can deteriorate as adults and experience upper urinary tract dysfunction.

Adults with Cerebral Palsy have a higher risk of respiratory failure. People with Cerebral Palsy are at risk for low bone mineral density. The shafts of the bone are often thin and become thinner during growth due to more than normal joint compression causes by muscular imbalances. Articular cartilage may atrophy leading to narrowed joint spaces. Depending on the degree of spasticity a person with Cerebral Palsy may exhibit a variety of angular joint deformities.

People with Cerebral Palsy tend to be shorter in height than the average person because their bones are not allowed to grow to their full potential. Children with Cerebral Palsy are prone to low trauma fractures, particularly children that cannot walk. Hip dislocation, ankle equinus or plantar flexion deformity are the two most common

CEREBRAL PALSY – continued

deformities among children with Cerebral Palsy. Flexion deformity of the hip and knee can occur. Children may develop scoliosis before the age of 10. Estimated prevalence of scoliosis in children with Cerebral Palsy is between 21% and 64%.

Scoliosis can be corrected with surgery, but Cerebral Palsy makes surgical complications more likely even with improved techniques. Hip migration can be managed by soft tissue procedures and adductor musculature release. Advanced degrees of hip migration or dislocation can be managed by more extensive procedures such as femoral and pelvic corrective osteotomies. Both soft tissue and boney procedures aim at prevention of hip dislocation in the early phase aim at hip containment in restoration of anatomy in the late phases of disease. Equinus deformities managed by a series of methods, especially when dynamic affixed static deformity ensues, surgery may become mandatory.

An infant with Cerebral Palsy may not be able to suck, swallow or chew. Gastroesophageal reflux is common in children with Cerebral Palsy. Children with Cerebral Palsy may have too little or too much sensitivity around and in the mouth. Poor balance when sitting, lack of head control, mouth and trunk, not being able to bend with hips enough to allow the arms to stretch forward to reach and grasp foods or utensils and lack of hand-eye coordination can make self-eating difficult. Eating difficulties are related to more severe involvement. Dental problems can also be contributed to difficulties with eating. Pneumonia is also common where eating difficulties exist caused by undetected aspiration of food or liquid. Fine finger dexterity like being able to pick up a utensil is more frequently impaired than gross manual dexterity like for spooning food onto a plate.

Speech and language disorders are common in people with Cerebral Palsy. The incidence of dysarthria is estimated to range from 31-88% and around one quarter of the people with Cerebral Palsy are nonverbal. Speech problems are associated with poor respiratory control, laryngeal and velopharyngeal dysfunction and oral articulation disorders that are due to restricted movement in the oral facial muscles. There are three types of dysarthria in Cerebral Palsy: Spastic, Dyskinetic (Athetosis) and Ataxic.

Early use of augmentive and alternative communication systems may assist the child in developing spoken language skills. Pain is common and may result from the inherit deficits associated with the condition along with the numerous procedures children typically face. When children with Cerebral Palsy are in pain they experience worse muscle spasm. Pain is associated with tight or shortened muscles, abnormal posture, stiff joints, unsuitable orthosis, etc. Hip migration or dislocation is a recognizable source of pain in Cerebral Palsy children and especially in the adolescent population.

CEREBRAL PALSY – continued

Associated disorders with Cerebral Palsy include: Intellectual disability, seizures, muscle contractures, abnormal gait, osteoporosis, communication disorders, malnutrition, sleep disorders and mental disorders which would include, but not be limited to depression/anxiety. In addition to these, functional gastrointestinal abnormalities contributing to bowel obstruction, vomiting and constipation may also arise. Adults with Cerebral Palsy may have ischemic heart disease, cerebral vascular disease, cancer and trauma more often.

Obesity in people with Cerebral Palsy has more severe gross motor functional classification system assessment and particularly is considered risk factors for multimorbidity. Related conditions may include apraxia, dysarthria and other communication disorders, sensory impairments, urinary incontinence, fecal incontinence or behavioral disorders. Seizure management is more difficult in people with Cerebral Palsy as seizures often last longer. Epilepsy and asthma are common co-occurring diseases in adults with Cerebral Palsy. Associated disorders that co-occur with Cerebral Palsy may be more disabling than the motor function problems.

Cerebral Palsy is due to abnormal development or damage occurring to the developing brain. This damage can occur during pregnancy, delivery, the first month of life or less commonly in childhood. Structural problems in the brain are seen in 80% of the cases most commonly within the white matter.

More than three quarters of cases are believed to result from issues that occur during pregnancy. In certain cases there is no identifiable cause, typical causes include problems in intrauterine development, for example exposure to radiation, infection, fetal growth restriction, hypoxia of the brain (from thrombotic events, placental insufficiency and vocal cord prolapse), birth trauma during labor and delivery and complications around birth or during childhood. Between 40-50% of all children who develop Cerebral Palsy were born prematurely. Most of these cases (75-90%) are believed are due to issues that occur around the time of birth, often just after birth. Multiple birth infants are also more likely than single birth infants to have Cerebral Palsy. After birth, other causes include toxins, severe jaundice, lead poisoning, physical brain injury, stroke abusive head trauma, incidents involving hypoxia to the brain such as near drowning, encephalitis or meningitis.

Diagnosis:

The diagnosis of Cerebral Palsy is historically rested on the person's history and physical examination. A general movement assessment which involves measuring movements that occur spontaneously among those with less than four months of age appears more accurate. Children who are more severely affected are more likely to be noticed and diagnosed earlier. Abnormal muscle tone, delayed motor development and persis-

CEREBRAL PALSY – continued

tence of primitive reflexes are the main early symptoms of Cerebral Palsy. Symptoms and diagnosis can typically occur by age two (2), although persons with milder forms of Cerebral Palsy may be over the age of five (5); if not, in adulthood when finally diagnosed.

Early diagnosis and intervention are seen as being a key part of managing Cerebral Palsy. It is a developmental disability.

Once a person is diagnosed with Cerebral Palsy, further diagnostic tests are optional. Neuroimaging, CT's or MRI's are warranted when the cause of a person's Cerebral Palsy has not been established. An MRI is preferred over CT due to diagnostic yield and safety. An abnormal neuroimaging study indicates a high likelihood of associated conditions such as epilepsy and intellectual disability. There is a small risk associated with sedating children to facilitate a clear MRI.

Cerebral Palsy is classified by types of motor impairment of the limbs or organs and by restrictions to the activities an affected person may perform. The gross motor functional classification system, expanded and revised, and the manual ability classification system are used to describe mobility and manual dexterity in people with Cerebral Palsy and recently the communication function classification system and the eating and drinking ability classification system have been proposed to describe those functions.

There are three main Cerebral Palsy classifications by motor impairment: Spastic, Ataxic and Dyskinetic. Additionally, there is a mixed type that shows a combination of features of the other types. These classifications reflect the areas of brain that are damaged. Cerebral Palsy is also classified according to topographic distribution of muscle spasticity.

This method classifies children as diplegic (bilateral involvement with leg involvement greater than arm involvement) hemiplegic (unilateral involvement) or quadriplegic (bilateral involvement with arm involvement equal to or greater than leg involvement).

Spastic:

Spastic Cerebral Palsy is a type of cerebral palsy characterized by spasticity or high muscle tone often resulting in stiff jerky movements. It is an umbrella term encompassing spastic hemiplegia, spastic diplegia, spastic quadriplegia and when there is only one limb or one specific area of the body involved, spastic monoplegia. Spastic cerebral palsy affects the motor cortex of the brain, a specific portion of the cerebral cortex

CEREBRAL PALSY – continued

responsible for the planning and completion of voluntary movement. Spastic cerebral palsy is the most common type of overall cerebral palsy representing about 80% of cases.

Ataxic:

Ataxic Cerebral Palsy observed in approximately 5-10% of cases with cerebral palsy makes it the least frequent form of cerebral palsy. Ataxic cerebral palsy is caused by damaged cerebellar structures because of the damage to the cerebellum which is essential for coordinating muscle movements and balance. Patients with ataxic cerebral palsy experience problems in coordination, specifically in their arms, legs and trunk. Ataxic Cerebral Palsy is known to decrease muscle tone. The most common manifestation of ataxic cerebral palsy is intention (action) and tremor which is especially apparent when carrying out precise movements such as trying to tie shoe laces or writing with a pencil. This symptom gets progressively worse as the movement persists making the hands shake.

Dyskinetic:

Dyskinetic Cerebral Palsy is primarily associated with damage to the basal ganglia and substantia nigra in the form of lesions that occur during brain development due to bilirubin encephalopathy and hypoxic ischemic brain injury. Dyskinetic Cerebral Palsy is characterized by both hypotonia and hypertonia due to the affected individual's inability to control muscle tone. Diagnosis usually occurs within 18 months of birth and is primarily based upon motor function and neuroimaging techniques.

Dyskinetic Cerebral Palsy is an extrapyramidal form of cerebral palsy. It is divided into two different groups: choreoathetosis and dystonia. Choreoathetotic cerebral palsy is characterized by involuntary movements whereas dystonic cerebral palsy is characterized by slow strong contractures which may occur locally or encompass the whole body.

Mixed:

Mixed Cerebral Palsy has symptoms of dyskinetic ataxia and spastic cerebral palsy appearing simultaneously each to varying degrees and both with and without symptoms of each.

Management:

Cerebral Palsy has varying severity and complexity across the life span. It could be considered a collection of conditions for management purposes. A multi-disciplinary approach with cerebral palsy management is recommended focusing on maximizing individual function, choice, independence in line with international classification of

CEREBRAL PALSY – continued

functioning disability and health goals. Various forms of therapy are available to people living with cerebral palsy.

Treatments include: physical therapy, occupational therapy and speech/cognitive therapy, water therapy, medications to control seizures, the alleviation of pain and relax muscle spasms, surgery to correct anatomic abnormalities or release tight muscles, braces and other orthotic devices, rolling walkers, communication aides such as computer with attached voice synthesizer.

Medications include: anticonvulsants, botulinum toxin, biphosphonates, Diazepam, bimanual training, casting, constraint induced movement therapy, context-focused therapy, fitness training, goal-directed training, hip surveillance, home programs, occupational therapy after botulinum toxin, pressure care and surgery.

Prognosis:

Cerebral Palsy is not a progressive disorder, but the symptoms can become more severe over time. A person with the disorder may improve somewhat during childhood if he or she receives extensive care, but once bones and musculature should become more established, orthopedic surgery may be required. People with Cerebral Palsy may have varying degrees of cognitive impairment or none whatsoever. The full intellectual potential of a child born with cerebral palsy is often not known until the child starts school.

People with Cerebral Palsy are more likely to have learning disorders, but abnormal intelligence. Intellectual level among people with Cerebral Palsy varies from genius to intellectually disabled, as it does in the general population and experts have stated that it is important not to under estimate the capabilities of a person with Cerebral Palsy and to give them every opportunity to learn.

The ability to live independently with Cerebral Palsy varies widely depending upon the severity of each person's impairment and partly on the capability of each person to self-manage the logistics of life. Some individuals with Cerebral Palsy require personal assistance services for all activities of daily living. Others only need assistance with certain activities and others do not require any physical assistance, but regardless of the severity of the person's physical impairment, a person's ability to live independently often depends on primarily on the person's capacity to manage the physical realities of his or her life autonomously. In some cases people with Cerebral Palsy recruit higher and manage a staff of personal care assistants (PCA's). PCA's facilitate the needs of their employers by assisting them with their daily personal needs in a way that allows them to maintain control over their lives.

Physiatrist's Voice
NEWSLETTER JUNE 2021

CEREBRAL PALSY – continued

Cerebral Palsy can significantly reduce a person's life expectancy depending on the severity of their condition and the quality of the care they receive. A 5-10% of children with cerebral palsy die in childhood particularly when seizures and intellectual disabilities also affect the child. The ability to ambulate, roll and self-feed has been associated with increased life expectancy. While there is a lot of variation in how cerebral palsy affects people, it is has been found that independent gross motor functional ability is a very strong determinate of life expectancy. The most common cause of death is related to respiratory causes, but middle-age cardiovascular issues and neoplastic disorders become more prominent.

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Review Article

Cerebral Palsy Life Expectancy: Discrepancies between Literature and Community Data

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ABSTRACT

Cerebral palsy patients and their families need to predict patients' length of survival for emotional, medical, and financial planning reasons. Providing these estimations is wrought with challenges, some of which are specific to the significant variations in survival that are observed amongst this group of patients. The statistical models that are used to assess life expectancy are plagued by mathematical limitations, faulty assumptions, and the exclusion of factors that are critical to prognosis. In this commentary, we provide evidence that the medical community generally underestimates life expectancy in cerebral palsy. With medical innovations extending lives, some of the literature on life expectancy is outdated, but old data does not explain the extent of the discrepancies we see between what we observe in our communities and what is espoused in the literature. Herein, we offer potential explanations for these discrepancies and call on the medical community to improve predictions of survival in cerebral palsy patients so that they can get the care they need. The harms and dangers of biased life expectancy data cannot be overstated, and cerebral palsy patients are consistently living longer than the current literature would suggest. We demonstrate here why life expectancy models underestimate cerebral palsy survival in the community.

Keywords: Cerebral palsy; Life expectancy; Prognosis

INTRODUCTION

Estimating cerebral palsy patients' survival is critical, not only for the emotional well-being of the patients and their families but also for optimizing medical and financial planning to ensure that the patients receive appropriate care and resources over the course of their lives [1]. Unfortunately, predicting an individual patient's lifespan is problematic in any context, and cerebral palsy presents specific challenges that make survival prognosis particularly complex.

Given the wide range of cerebral cortical and subcortical clinical presentations and different symptoms in cerebral palsy, some experts question if the condition should be a diagnosis or instead simply a description of pathology [2-4]. The heterogeneous nature of cerebral palsy makes it even more unwieldy to predict survival in those with this condition than in those whose condition is associated with narrower clinical variability [3].

Not only is there an enormous range in outcomes across cerebral palsy patients - survival in adults with the condition can differ by more than 40 years - but many of the relevant factors are lacking in life expectancy models or are considered in an outdated way [5]. These insufficiencies render these models incomplete and unable to reliably predict how long an individual cerebral palsy patient will live.

LITERATURE REVIEW

Statistical models have limited predictive value

Certain factors can help to predict outcomes in cerebral palsy patients. For example, those with higher functioning tend to have much more favorable prognosis [6]. Given the importance and the specific implications for neuroplasticity in improving functioning related to cerebral palsy, timing of intervention is also a factor [6]. Nonetheless, as these factors represent a small part of the picture for any individual patient, they are limited in their practical use when estimating the lifespan of any given patient.

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Even with more precise information on cerebral palsy and its prognostic factors, predicting how long a given patient will live is riddled with challenges. Statisticians have long recognized that for even the most clearly defined populations, group data tend to offer little information on individual cases [7-10]. As they point out, mean distributions, which are used to calculate patients' life expectancies, simultaneously provide information about everyone and no one [11].

Predictive models are limited in their value partly because they depend on the imprecise practice of extrapolation. Calculating mean life expectancy requires that each member of the specified cohort has died [12]. Given that meeting this requirement for accurate life expectancy calculation is impossible, statisticians instead extrapolate survival curves and specify the assumptions that accompany them.

We are restricted in our ability to estimate the life span of any given cerebral palsy patient because of mathematical limitations. However, there are several other factors unique to cerebral palsy and its relevant data that make it clear that the estimates we do generate are based on faulty assumptions. These assumptions include that the care each patient receives is equivalent in quality, that predictive factors remain stably related to survival, and that we have enough information on patients to produce reliable information on life expectancy.

Quality of care is not properly accounted for in models of life expectancy

Though quality of care significantly impacts outcomes, group statistics on cerebral palsy tend to neglect differences in the quality of care that patients receive. Cerebral palsy care has been shown to be affected by several factors that are independent of the clinical realities of the patient, including where the patient lives, the provider they see, and how their care is financed [13].

In some places, cerebral palsy patients receive outdated approaches to care, presumably with less beneficial outcomes than in cases where the most advanced and evidence-based interventions are deployed [13]. Any model for life expectancy that fails to take the quality of an individual patient's care into account is inherently incomplete.

The specific relationship between factors and survival changes over time

The need for gastronomy feeding has been identified as an indicator of poorer prognosis in cerebral palsy, so lifespan estimates have tended to be lower for those using feeding tubes [6]. However, in recent years gastronomy feeding has increased significantly, with cerebral palsy patients being offered feeding tubes much sooner than they once would have been. It is thus likely no longer appropriate in many instances for life expectancy models to consider gastronomy feeding as a marker for shorter survival. On the contrary, earlier use of feeding tubes may instead now indicate better quality of care, which could extend survival rather than shorten it. Indeed today, those using feeding tubes have a lower average degree of disability than they once did, and their survival has improved across recent decades [14].

We do not fully understand the impact of certain factors on survival

In addition to higher quality of care, there are also nonclinical factors that have been deemed important for survival in cerebral palsy patients. Researchers point to socioeconomic factors, for instance, including access to better care, appropriate housing, superior schooling, occupational opportunities, and proper nutrition as important for promoting healthier and longer lives in cerebral palsy patients [6]. However, how exactly to factor these things into an individual case is not clear.

Though cerebral palsy registers could help us improve our understanding of these factors, many of these registers are not complete with respect to the information they provide. For instance, some may focus specifically on educating those with cognitive deficits and thus not include reliable information on those with good cognitive functioning [15].

New cerebral palsy registers are being developed to comprehensively cover all the cases within given geographical areas and to stratify them based on both clinical and nonclinical factors such as: dates of birth, sex, birth weight, and severity of functional impairments, but these registers have yet to provide significant information on longevity [15,16].

The medical community underestimates life expectancy in cerebral palsy

Given the importance of insight into life expectancy for cerebral palsy patients and their families, we cannot shy away from the challenge of optimizing our tools for providing such information. Clearly the current models suffer several limitations and need to be updated and improved. Specifically, there is evidence that the medical literature on life expectancy in cerebral palsy patients significantly underestimates how much time these patients have left.

Medical innovations are leading to longer lives in cerebral palsy patients

High quality cerebral palsy research in the 21st century has led to significant improvements in both the safety and efficacy of cerebral palsy interventions and growth in clinical trials aimed at identifying more and better ways to improve and extend the lives of those with the condition [13-17]. There is little debate that cerebral palsy survival has improved since the middle of the 20th century, particularly for those with severe disease [6].

One study showed that the life expectancy for a group of males with cerebral palsy increased from 14 years based on data from 1983 to 1995 to 20 years based on new data available in 2002 [6]. Life expectancy among people with cerebral palsy has now been shown in studies across several countries to be largely similar to that of the general population, with more than 90% of children with the condition having normal life expectancy [13-17].

Even in the tube-fed patients who are considered at higher risk for poor prognosis, improvements are being observed. A study on more than 50,000 cerebral palsy patients found that between

1983 and 2010, adolescent and adult life expectancies increased by 1 to 3 years for tube-fed patients [1].

There are a multitude of factors that help explain the improvements we have seen in cerebral palsy longevity and care over the past 25 years, including better anti-seizure medications, use of the ketogenic diet and other evidence-based nutritive strategies, prevention and treatment of fractures and osteoporosis, and medications for spasticity including intrathecal baclofen pumps and botulinum toxin [6,18-23]. We can also better prevent aspiration and pneumonia through salivary gland injections of botulinum toxin and salivary gland or duct ligation duct ligation, which helps prevent pneumonia [24-28].

Discrepancy exists between what is observed in the community and what is seen in the literature

Despite its complexity, life expectancy estimation for cerebral palsy patients is based largely on a small number of relevant publications. Unfortunately, there are critical flaws in the data represented in these pieces, and the results are inconsistent with what we have found while investigating the lifespan of cerebral palsy patients across several local clinics.

Interestingly, we found not only that age of death of individual cerebral palsy patients differed significantly from statistical models for life expectancy may predict but that the difference tended heavily in one direction. Rather than simply deviating randomly from what might be expected, the actual lifespan of the cerebral palsy patients we followed was invariably longer than what would be predicted based on the current medical literature.

An investigation into the details of the many publications on life expectancy in cerebral palsy paints a clearer picture for the discrepancy between what is seen in the literature versus what is seen in our communities. According to sworn deposition testimony by Dr. Herbert Grossman, he did not gather the information on patients that was included in his *New England Journal of Medicine* article "Life Expectancy in Profoundly Handicapped People with Mental Retardation" from August 1990 that described nearly 130,000 people within the California Department of Developmental Services between 1980 and 1991[29,30]. In addition to the data collection issues and resulting unreliability of these data, the study was lacking critical information with serious implications for life expectancy, including the type of medical care the patients were receiving, their specific cause of death, and whether patients died in institutions.

Two authors of several of the publications on life expectancy in cerebral palsy - Drs. Strauss and Shavelle - also used data from the State of California and specifically employed the Client Development Evaluation Report (CDER, which formed the basis of their life expectancy data and relevant claims in their publications [5,6,31-35]. Unfortunately, medical experts were not involved in providing the information required for this complex tool marring the data foundational to much of the literature on cerebral palsy life expectancy.

Any resulting statistical analysis conducted on these unreliable data cannot therefore be viewed as valid. One egregious problem that has since been revealed is that approximately 30% of the people whose data were analyzed did not have the appropriate diagnosis for this type of analysis. Critical information on the care received is thus completely lacking in all published literature based on CDER.

Investigations have revealed underlying drivers for the discrepancy

More troubling than statistical limitations and lack of comprehensive data is corruption to the medical literature due to specific monetary incentives. Under oath, an author of the *New England Journal of Medicine* study mentioned above admitted that the intention behind the publication of the article was to defend medical malpractice lawsuits [29,30]. In other words, the motivation for the article was to provide evidence for shorter life expectancies and thus lower perceived lifetime costs for cerebral palsy patients so that payouts could be justifiably lowered.

In addition to the lack of reliability of the CDER data, it has also come to light that Drs. Strauss and Shavelle have not cooperated in providing access to the relevant database so that other experts could have the opportunity to analyze the raw data to determine their validity and the ability to draw any meaningful conclusions from them [36]. When considering the reasons for their refusal to share the database, it is important to note that Dr. Shavelle has conceded that in his expert witness testimonies, approximately 90% of his depositions are on behalf of the defendant, meaning that the value his testimony serves is to minimize payouts for cerebral palsy patients and their families by providing apparent evidence for lower economic damages.

It has also come to light that these statisticians conducted complex but seemingly arbitrary statistical analyses that further drove down life expectancy estimates in their publication [37]. In addition, it is worth noting that literature in support of plaintiffs - i.e. that suggests longer survival in cerebral palsy patients - was once available on Strauss and Shavelle's website but has since been taken down [36]. While we cannot draw firm conclusions for the reasons for any of these pieces of information, we must consider that when taken together in context, Drs. Strauss and Shavelle may have had some motivation to underestimate survival in those with cerebral palsy.

CONCLUSION

It is impossible to predict with great accuracy and precision how long an individual cerebral palsy patient will live. Our current strategies for these estimations are limited by mathematical realities as well as a lack of relevant data on how clinical and nonclinical factors affect longevity in these patients. With new medical innovations, even the most severely disabled cerebral palsy patients are living longer than ever before, and what we are observing in our communities does not match the medical literature on cerebral palsy life expectancy. Specifically, the medical literature - and often medical professionals themselves - underestimate how long cerebral palsy patients will survive.

Though more research is needed to help us improve our ability to predict life expectancy so that patients and their families can plan accordingly, we know that the best care a cerebral palsy patient can receive is individualized and includes a combination of treatments [1,6]. Common sense dictates that more resources are associated with more access to better care and more opportunity to leverage whatever medical innovations become available in the future - the realities of which we simply cannot incorporate into any model of life expectancy or any model for financial planning.

The complexity of life expectancy estimation in cerebral palsy makes it perhaps unsurprising how a case for a shorter lifespan could be built in almost any individual case. Nonetheless, as clinicians, we know that even highly compromised cerebral palsy patients, who are spastic, severely mentally retarded, and fed through a gastronomy tube, can live a long life and that their care should not be undermined by cold statistics that do not produce predictions consistent with what we see in practice. Several aspects of each patient's condition and fragility, the care they receive, and the environment in which they live play into their survival and cannot be accounted for by current models.

Our goal as a medical community must be to provide the best possible information at hand. The current medical literature on life expectancy in cerebral palsy is flawed and cannot be used to accurately address individual cerebral palsy patients. Instead, as physicians who care for cerebral palsy patients, our approach to predicting survival should embrace the strengths of the literature and incorporate our knowledge, training, and clinical practice experience. By supplementing the credible data on life expectancy in cerebral palsy with our expertise on the influence of fragility, stability, environmental factors, and access to appropriate medical care, we can significantly improve upon the predictions offered through statistical models alone.

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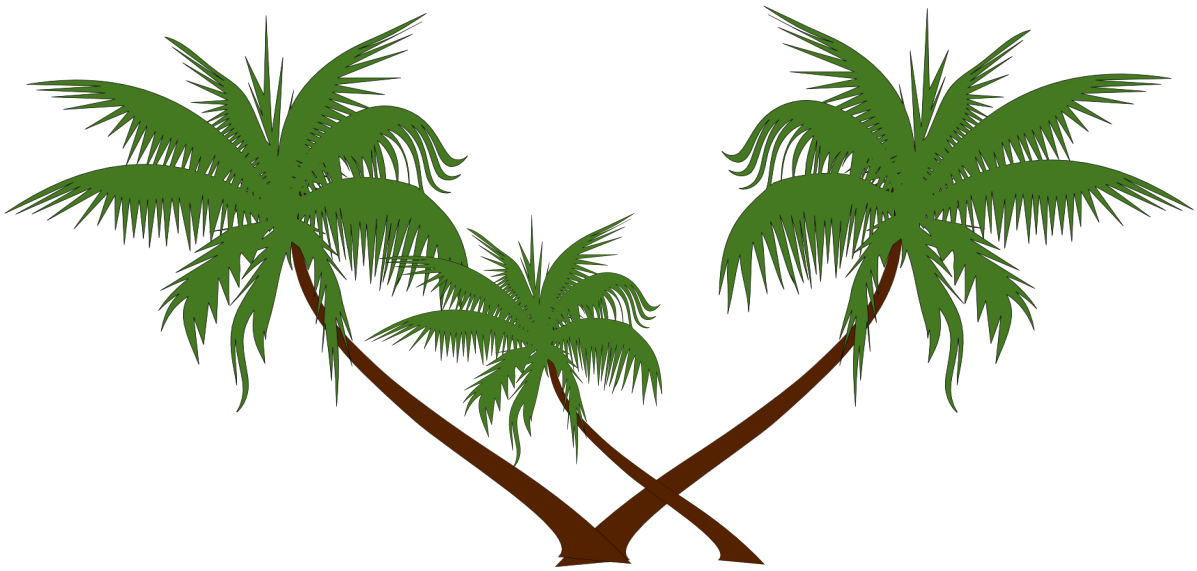


Physiatrist's Voice
NEWSLETTER JUNE 2021

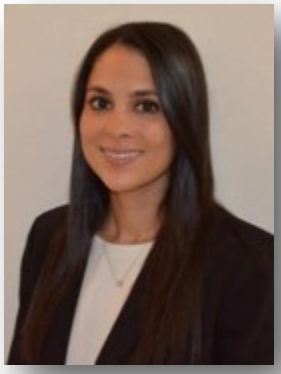
Residency Updates

Physiatrist's Voice
NEWSLETTER JUNE 2021

University of Miami Miller School of Medicine/Jackson Memorial Hospital
PM&R Residency Update

Natalia Miranda-Cantellops MD, Resident Liaison
Andrew Sherman, MD, Residency Program Director

Greetings from Miami!



Natalia Miranda-Cantellops MD

And just like that we are done with the academic year 2020-2021! The graduation of our 6 outgoing residents is set to be celebrated on June 23rd 2021. In this awesome graduating class, we have Brittany Mays who is leaving the hot Miami weather to start a Headache fellowship at Harvard University! Rosa Rodriguez is headed to the west coast at Loma Linda University for an Interventional Spine Fellowship. Joining her in the state of California is Manoj Poudel, who will be at UC-Davis for a Sports Medicine Fellowship. Scott Klass, will be starting at NY Presbyterian Columbia/Cornell for Sports Medicine Fellowship as well. Michael Dove will be going to University of Virginia for Interventional Pain Fellowship. And last but not least, David Valdes who will be starting as an attending at Memorial Hospital over at Hollywood, Florida. Stay tuned for graduation pictures in next newsletter!

Back in March, we had our first PM&R Resident Retreat. We had the pleasure of starting the day off with guest speaker, Monica Verduzco-Gutierrez, MD who presented and lead a discussion on leadership. It was great to hear her story and keep us motivated on going forward in our careers. We were then joined by faculty from the Public Health Sciences at University of Miami who taught us about Mindfulness, Breathing & Stress Reduction Techniques. We were able to clear our minds from all the daily craziness! We like to thank all of our attendings for allowing us to take the time off and enjoy this retreat.

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University of Miami Miller School of Medicine/Jackson Memorial Hospital
PM&R Residency Update
Natalia Miranda-Cantellops MD, Resident Liaison
Andrew Sherman, MD, Residency Program Director
-continued

As part of resident wellness and involvement, we had a Resident Kickball team. Even though we were last in standings, we made it all the way to the championship! We ended up second place but had a great time the whole season!

On May 7, 2021, we had our 15th Annual Research Day where the senior residents and SCI fellow presented their research projects to the PM&R department. We had keynote speaker Matthew N. Bartels, MD,MPH from Montefiore Health System presenting "Exercise as Medicine: Cardiopulmonary Disease, Stroke, Schizophrenia, and Beyond".

Physiatrist's Voice
NEWSLETTER JUNE 2021

University of Miami Miller School of Medicine/Jackson Memorial Hospital
PM&R Residency Update
Natalia Miranda-Cantellops MD, Resident Liaison
Andrew Sherman, MD, Residency Program Director
-continued

Congratulations to our residency program coordinator Coretha Davis who received a regional award as the 2021 Resident Coordinator of the Year Award. We don't know what we would do with out her!

In more news, we have various new physicians joining our faculty to be in the upcoming fall. The current SCI fellow, Dr. Jose Vives-Alvarado will be one of the new attendings starting as Assistant Professor in our department. He will be a great addition to our program!

Lastly, we have big changes coming to the residency as we transition to a new program director, Dr. Chane Price. He will take over the role starting July 1st with assistant program director, Dr. Diana Molinares. We are excited to have them and can't wait to see what they have planned to continue to grow our residency. We must thank Dr. Andrew Sherman, our current PD, for all the support he has always given us throughout the years and who will continue to support our program and education.

Until next time!

Physiatrist's Voice
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Larkin Community Hospital PM&R Residency Update

Colleen Neubert, DO PGY-3
Jose J. Diaz, DO, Residency Program Director

Warm Greetings from the Larkin Physical Medicine and Rehabilitation Residency Program!

Colleen Neubert DO

As the academic year is coming to an end, we feel bittersweet emotions as we celebrate the success of our seniors as well as prepare for 9 new residents to join our Larkin family on July 1st. We would like to extend a big thank you to our outgoing chiefs Kathryn Nelson, DO and Tanner Candelore, DO for an excellent year! They have gone above and beyond during these difficult times during the pandemic. I am happy to announce our new chief residents for 2021-2022, Eric Lam, DO and Trevor Persaud, DO. Congratulations gentleman! They are off to a great start preparing the program for our new residents.

I would like to take the opportunity to highlight our amazing senior class. In only a few short weeks they will be beginning fellowships or starting their first jobs out of trainin
g. Below is a list of the seniors graduating this 2020-2021 cycle as well as their employment location or Fellowship program.

- Ala Elyman, DO, Parkinson's Disease and Movement Disorder Fellowship at Shirley Ryan Ability Lab in Chicago, IL
- - Kathryn Nelson, DO, Larkin Community Hospital Pain Management Fellowship in Miami, FL
- Grant Drake, DO, Idaho
- Ryan Brooks, DO, Larkin Community Hospital Pain Management Fellowship in Miami, FL
- Tanner Candelore, DO, VA San Diego Healthcare System
- Zev Klapholz, DO, Philadelphia, PA
- Romy Ryan, DO, Louisiana
- Robert Kindell StClair, DO, South Florida

We are very proud of all of our seniors and what they have accomplished. Congratulations!

Physiatrist's Voice
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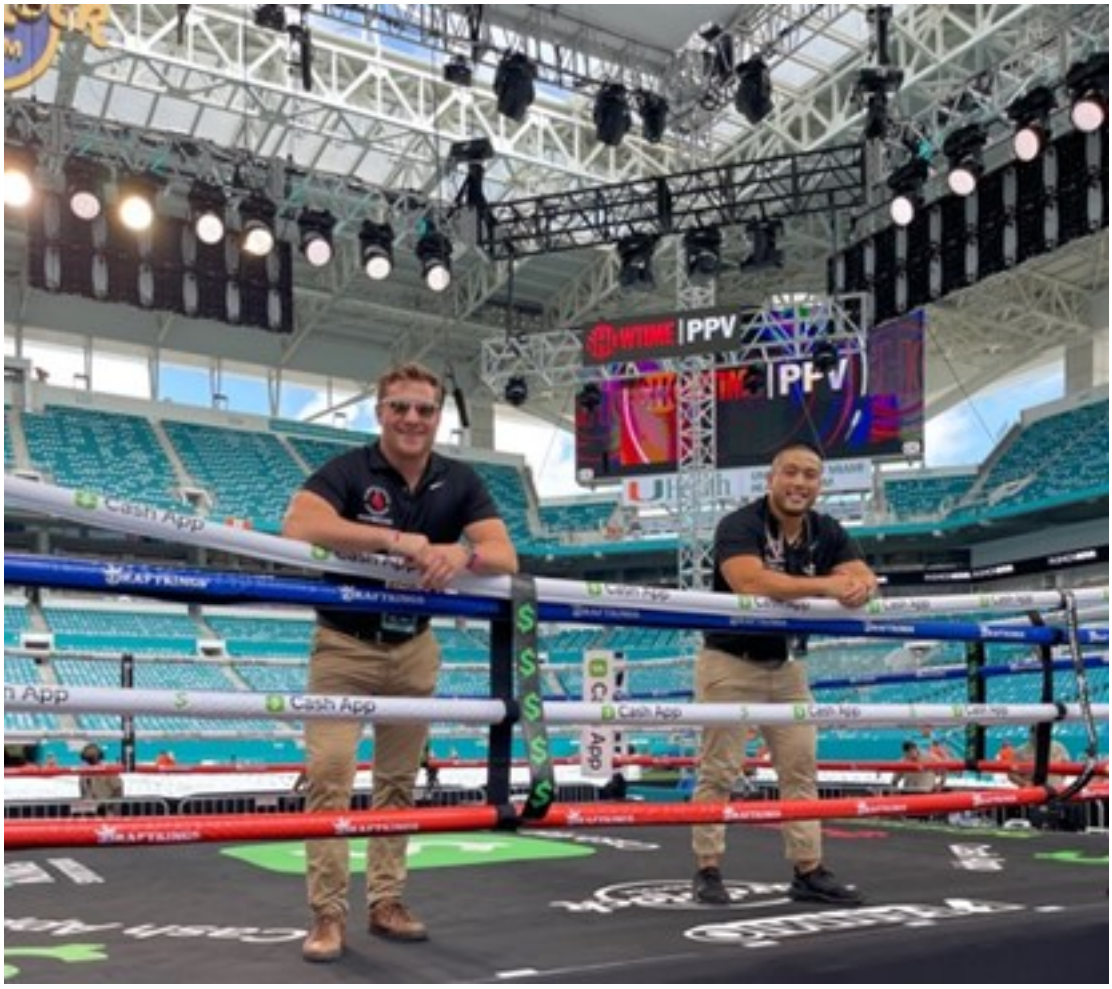
Larkin Community Hospital PM&R Residency Update

Colleen Neubert, DO PGY-3
Jose J. Diaz, DO, Residency Program Director

Two of our very own residents have a passion for sports medicine and have been volunteering ring-side. They are learning the ropes on what it entails to be a ring-side physician. Aleks Pecherek, DO (left) and Alan Nyugen, DO (right) seen below.



Physiatrist's Voice
NEWSLETTER JUNE 2021

Larkin Community Hospital PM&R Residency Update

Colleen Neubert, DO PGY-3
Jose J. Diaz, DO, Residency Program Director

We hope that you all have a great summer and continue to stay healthy!

Warm Wishes,

Colleen Neubert, DO PGY- 3
Larkin Community Hospital Department of PM&R
FSPMR Resident Liaison

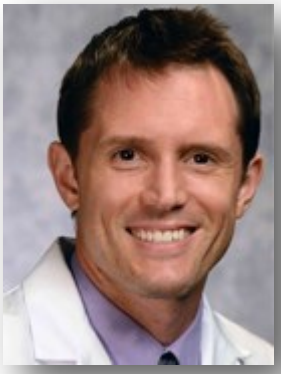
Physiatrist's Voice
NEWSLETTER JUNE 2021

Memorial Healthcare System PM&R Residency Program

Dr Matthew Voelker, PM&R Resident Liaison to FSPMR
Jeremy Jacobs DO, Residency Program Director

Memorial Healthcare System

Greetings from Hollywood Florida,


Matthew Voelker, DO

Full House – This July marks the first time we have a full residency program (PGY1-PGY4) having just began this journey 3 years ago. We are thrilled to introduce our new resident class.

Kevin John from Cooper City FL:
Nova Southeastern University
Cesar Trivino from Sugarland TX: University of Texas
Elvis Guzman from Pembroke Pines FL:
Ross University
Whitney DeOliveira from Hialeah, FL:
Nova Southeastern University

AAP Awards for top rated posters in 3 of 8 categories!

COVID-19 Associated Coagulopathy in a Rehabilitation Patient
Robert Mousselli, DO PGY-2

Impact of an Aggressive Palliative Approach to Acute Pain Management in a Young Opioid-Naive Patient
Andres Gutierrez PGY-2

A Case of Surfer Myelitis, A Rare Rapidly Progressive Painful Myelopathic Syndrome
Abhinav Mohan PGY-3

Honors

MHS GME

Outstanding Resident of the Year	Dr. Robert Mousselli (PGY-2)
Program Director of the Year	Dr. Jeremy Jacobs (RD)

Florida Atlantic University

Outstanding Clinical Elective Teacher	Dr. Jeremy Jacobs

Fort Lauderdale Magazine's:

Physiatrist's Voice
NEWSLETTER JUNE 2021

Memorial Healthcare System PM&R Residency Program

Dr Matthew Voelker, PM&R Resident Liaison to FSPMR
Jeremy Jacobs DO, Residency Program Director

Top Doctors of the Year.
Dr's Alan Novick, Ivor Nugent, Janice Cohen and Jeremy Jacobs

Cancer Rehab:
This fall we will be opening our cancer rehab program with new faculty to introduce soon.

Interview Season
Our PGY3's have completed and lined up some exceptional fellowship interviews and are excited to set the tone as our program's first PGY-4 class.

It's a Boy!
Dr. Yvette Little (PGY-1) had a healthy newborn this month and we have our first resident PMR baby. It's all very exciting!

Wishing you all well and a fantastic finish of this one of a kind year!

Physiatrist's Voice
NEWSLETTER JUNE 2021

University of South Florida PM&R Residency Update

Stefan Litzenberger DO, Resident Liaison
Marissa McCarthy, MD, Residency Program Director

USF PM&R Program Update

Stefan Litzenberger DO

The end of spring and beginning of summer is an exciting time of significant transition. Our PGY-4s are preparing to move on to bigger and better things and we are sad to see them go. They are looking forward to starting their first attending job doing inpatient rehab for one, and complete interventional pain and hospice/palliative care fellowships for the others. They are going to be missed, but we are sure that they accomplish great things in their sphere of influence and the world of physiatry.

Those of us left behind are transitioning into our new roles. We have a new set of chiefs who are wasting no time in adding their flare to the program. They are hoping to build on the foundations laid by the chiefs before them. The transition to a completely virtual didactic curriculum over the last year was not easy, but we are confident that moving forward we will be even more effective in the way we teach one another safely. In fact, our own Dr. Jonas Santos will be presenting a case at the FSPMR annual conference here in Tampa. We are excited to host the conference in our wonderful city and to learn from Dr. Santos and the others who come prepared to educate and inspire.

There are few as excited this time of year as the incoming interns. They have recently completed medical school and are the newest minted physicians. We all remember the excitement we once felt as we donned our regalia, received our diplomas, and prepared ourselves for that first day in the hospital. We congratulate all who have completed that incredible challenging step in their education and hope the best for each one of them. We have an amazing cohort of incoming interns, and they are well prepared and excited to hit the ground running and heal those who come to us in need.

This new academic year will be filled with challenges as we attempt to return to our "old normal" and provide quality care to the many who may not be had access to it over the last year. Our censuses are returning to normal, patient volume is increasing, we are getting back to work and having a blast doing it.

Physiatrist's Voice
NEWSLETTER JUNE 2021

Welcome FSPMR's newest Resident Liaison, representing a new Florida PM&R Residency Program at West Florida Hospital/HCA Healthcare.

Zeeshan Haque MD,
PGY2
West Florida Hospital
Pensacola

Physiatrist's Voice
NEWSLETTER JUNE 2021

Be sure to save your seat for
our
August 12—15 Conference

See you in Tampa!!