Physiatrist's Voice

NEWSLETTER December 2021

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

PRESIDENT'S MESSAGE

By Mark Rubenstein, M.D.

December 2021

In this Issue

This winter newsletter will be released as we conclude a memorable 2021. On behalf of the Board of Directors of the Florida Society of Physical Medicine & Rehabilitation, I wish each one of you the Happiest of Holidays.

2021 has been eventful to say the least. We were pleased to have a live Annual Meeting in Tampa as we covered in previous newsletters. Plans are already underway for next year's program with an exciting agenda for the FSPMR Breakout rapidly taking shape. Once again we will meet in Tampa, July 28 – 31, 2022. Please consider marking your calendars and attending if the timing works for you.

Organized medicine remains active. I have attended the AAPMR State President's meeting, but have little to report from these meetings. For those of you that follow PhyzForum (the Academy's chat groups with daily e-mail updates in various sub-specialties of PM&R) the issue of board recertification seems to be discussed repeatedly by the same parties. The ABPMR is rolling out the Longitudinal Assessment re-certification pathway for those board subspecialty certified in Pain Medicine. If you are one of those individuals, please make sure you "register" for this option should you elect same. We have seen large changes in the recertification process, with most organizations shifting to on-going assessments via quarterly or yearly questions rather than high-stakes exams every ten years.

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COVID-19 has clearly drawn a line between science and politics. For those of us who trained when evidenced-based medicine became the standard (the late 80's), some of the rules and regulations passed belie explanation. The Florida Medical Association was successful in 2020 in passing COVID-19 liability protection for physicians in the State of Florida, but most physicians don't realize that the liability protection is only granted through March of 2022. The FMA does plan to seek legislation to extend this liability protection for another year.

The FMA Legislative team remains busy preparing for the upcoming legislative session which runs from 1/11 thru 3/11/22. There are 3 or 4 dominant issues in this year's legislative process which could theoretically affect us in many ways. Every certain number of years there is a "re-districting" process that re-draws all of the House, Senate, and Congressional maps. We also have a Governor who plans to run again for the position in 2022, with apparent aspirations for the White House in 2024. What the re-districting process means is that ALL 160 legislators will be up for re-election after districts are re-drawn. Obviously this can have far-reaching impacts on the legislative process in Tallahassee this coming winter.

Currently the State and Federal governments are at odds over vaccine mandates. The upcoming session will address legal ramifications of these political policies. This means that a lot of time and effort will be spent on addressing these issues. The negative becomes that it will be difficult to pass positive legislation that may alter how we practice medicine, but the converse can also be true where there is not enough time to pass negative legislation in other arenas.

As a refresher for those not familiar with the political process, we as physicians are often facing scope of practice expansion requests by other disciplines. Nurse Practitioners were successful in passing scope expansion last year due to a Senate President who made it his absolute priority. This year we expect the CRNA's to put forth a request for collaborative/independent practice as well. This will not likely affect most physiatrists, but other scope of practice expansion anticipated requests may do so. Psychologists have been apparently seeking to prescribe controlled substances, optometrists wish to perform laser surgery, and Physician Assistants are lobbying to change their designation to Physician

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Associates. While the P.A. designation is just a name change and does not change their scope of practice, it will likely confuse a number of patients.

Specific bills that are of interest and may affect our membership include the Tort bill that expands non-economic damages in wrongful death cases. Last year this bill passed the House, but was not heard in the Senate. Personal Injury Protection (PIP) repeal passed the originating legislative body but was vetoed by the Governor. The FMA is following this legislation closely and will monitor to encourage provisions which preserve medical payments (medpay).

As I mentioned in a previous message, the Parental Consent Bill was passed. It makes it a crime to provide assessment and treatment to a minor without written parental consent, even in an emergency situation. A bill to fix the glitches is proposed.

Prior Authorization continues to rear its head. Organized medicine is seeking legislation that will establish transparency as well as delineate time frames within which insurance companies have to respond. Telemedicine is another important issue that will be discussed in the upcoming agenda. The FMA has proposed legislation that will extend provisions to all physicians that provide Schedule III, IV, and V substances via telemedicine since that ability was lost when the Emergency Declaration expired in June of 2021. It is unlikely that the legislature will allow Schedule II's to be prescribed via telemedicine. Face to face visits will continue to be required for these.

On an even larger scale, physiatrists need to be cognizant of the proposed fee schedule cuts by Medicare. A 9.75% total reduction was planned. According to the AAPM&R and other sources, the cut is at least temporarily halted thru the actions of President Biden. However, it is not a permanent fix. I suspect that a percentage of physicians will still be officially opting out of Medicare.

Lastly, for those of you that do interventional pain, please make sure you have reviewed the new Medicare Guidelines and rules for spinal injections. There are new rules about quantity and frequency of injections, necessity of contrast, and even exclusion of sedation if provided by anesthesiology.

That's the update to conclude a busy 2021. Here's to wishing all of you a Happy, Healthy, and Successful 2022!!!

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The following article is from the
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The Need for Support Care for Successful Fall Prevention

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Mini Review

The Need for Support Care for Successful Fall Prevention

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ABSTRACT

Falls contribute significantly to serious injuries and death and are particularly common in the elderly. In addition to the damage caused by the falls themselves, the immobilization involved in the recovery from fall-related injuries is associated with deteriorating health and specific health risks, compounding the healthcare costs incurred from falls. Troublingly, falling also enhances the risk for subsequent falls. It is thus vitally important that effective fall prevention measures are developed and implemented, especially for vulnerable populations who are at heightened risk for falls. These populations include the elderly as well as those with relevant health conditions such as dementia and those taking certain medications. Research has shown that evidence-based fall prevention programs can effectively reduce the occurrence of devastating falls and prevent resulting injuries. With the appropriate level and amount of support care, morbidity, mortality, and healthcare costs associated with falls can be substantially reduced.

Keywords: Immobilization; Health risk; Support care; Dementia

INTRODUCTION

Falls are a major contributor to death and serious injuries

Falls are a major public health challenge because they lead to death, serious injury, and unlike other accidents, increase the risk of reoccurrence. Each year, 37 million people require medical attention after falling [1]. Though some falls are largely uneventful, nearly 700,000 people die annually from injuries sustained from these falls, making falls the second leading cause of unintentional death worldwide. Falls are the leading cause of Traumatic Brain Injury (TBI), including subdural hematomas, as well as hip fractures, each of which increases the likelihood of death in the short-term [2-8]. Falls are the cause of nearly half of TBI-related hospitalizations and more than 9 out of 10 hip fractures.

In the U.S, falls are also the most common cause of nonfatal injuries in people 65 and older, with millions of elderly people falling each year [2,9]. At least 20 % of elderly falls cause serious injuries, leading 3 million older people to seek emergency care for fall-related injuries annually [2,10-12]. For the one in four elderly people who fall each year, their fall doubles their risk for subsequent falls and the associated complications and costs. Even when younger, healthier populations are taken into account, up to 15% of falls lead to major injuries and lead to new health-related risks and increased spending [5].

LITERATURE REVIEW

The immobilization required to recover from falls is detrimental to health

In addition to damage sustained directly from fall-related injuries, the recovery process from falls is also associated with health deterioration. These indirect results of falls often occur due to the prolonged periods of bed rest or immobility required to heal. Indeed, nearly every organ system of the body is impacted by prolonged immobilization [13].

The complications that arise from bed rest and immobilization that follow accidental falls are most commonly musculoskeletal and cardiovascular in nature [14]. Musculoskeletal complications include disuse osteoporosis, degenerative joint disease, soft tissue alterations, and loss of muscle strength and endurance, whereas cardiovascular complications include venous

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thromboembolism, orthostatic hypotension, increased heart rate, and decreased cardiac reserve. Bedrest often also leads to a host of other complications, including pressure ulceration, urinary tract infections, endocrine and renal complications, glucose intolerance, hypercalcemia, constipation, and pneumonia [13,15].

Falls significantly increase healthcare spending

Falls are costly due to both the acute and chronic damage they cause. Hospitalizations, diagnostic testing, and potentially complex interventions contribute to these costs [16]. More than $750 million is spent each year on care related to fatal falls, and $50 billion is spent on medical costs from non-fatal fall injuries [17,18]. Non-fatal falls lead to $29 billion in Medicare spending, $12 billion in private or out-of-pocket spending, and $9 billion in Medicaid spending.

The mean cost for each fall that results in an emergency department visit has been estimated at nearly $11,500 [19]. For those requiring hospitalization, the average cost increases to nearly $30,000 per patient. Each hip fracture, for instance, is associated with a cost of over $39,500.

The complications associated with recovery and bedrest compound these fall-related costs [15]. With the number of elderly people in the U.S. growing, falls and related costs are likely to increase in coming years.

Injuries sustained from falls enhance risk for subsequent falls, compounding the importance of prevention

People who fall are at enhanced risk for subsequent falls for several reasons. For one, falls can diminish the ability to remain active, thereby eroding the strength and balance required for stability.

Reduced activity following falls is observed not only due to the injuries endured from the fall but also because of a fear of falling that commonly develops in people who fall. Between 2 and 4 out of every 10 people who fall become afraid of falling [20,21]. This fear reduces quality of life but also leads people to become less active, which in turn garners a loss of strength and balance [2,22].

In addition to the fear of falling that occurs following a fall, injuries sustained from falls can also enhance fall risk. People who have suffered TBI, for instance, have been identified in several studies as a population at high risk for falls [23]. Conditions associated with hip pain also increase fall risk, suggesting that those recovering from hip fractures likely have a heightened fall risk [24,25].

Preventing falls requires identifying risk factors, many of which are well understood

In addition to fear of falling and loss of physical strength and balance, other risk factors for falls have also been elucidated and point to the preventable nature of falls. Being of older age significantly increases one's risk for falling, and though age is not a modifiable risk factor, some of the physiological realities that make older people more susceptible to falls can be addressed to prevent falls [20]. For instance, falls are often linked to underlying health conditions that increase fall risk in specific ways that can be managed [5].

Urinary conditions such as Benign Prostatic Hyperplasia (BPH) and Overactive Bladder (OAB) increase fall risk, for nighttime falls and fractures [5]. Neurological conditions such as Parkinson's disease, multiple sclerosis, and stroke significantly increase fall risk [26]. Metabolic disorders, cardiovascular disease, chronic kidney disease, visual impairment, and arthritis are also associated with enhanced fall risk [24,27-30].

Several medications aimed at improving symptoms of conditions associated with falls can themselves enhance fall risk [5,31-33]. Psychotropic drugs, anticonvulsants and blood pressure-lowering drugs are the primary culprits for medication-associated falls. However, sedatives also increase fall risk, likely due to their tendency to impair coordination.

likely owing in part to their association with nocturia, urinary incontinence, urgency, and frequency, all of which can increase risk

Dementia substantially increases risk of falling

There is an abundance of data on the ways in which dementia increases people's risk of falling, as people with dementia are twice as likely to fall compared to people of similar age who are cognitively healthy [34]. Dementia increases fall risk through multi-pronged mechanisms that include a reduced ability to recognize hazards [20]. Approximately half of older adults with dementia in community-dwelling settings fall every year.

In addition to its detriment to cognition, dementia also affects fall risk by impairing balance and gait. Research has also shown that the results of falls can be worse in those with dementia and other neurodegenerative diseases than in those without it. For instance, fall-related subdural hematomas have been observed to lead to more severe consequences in those with neurodegenerative disease [35].

DISCUSSION

Evidence-based fall prevention programs are effective in preventing devastating falls

Given the devastating consequences of fall-related injuries like TBI and hip fractures, as well as the potential for falls to be fatal, it is imperative that we develop and implement effective strategies for fall prevention, particularly amongst those most susceptible to falls. Fortunately, data have shown that fall rates can be reduced with effective preventative interventions [36].

Individualized treatment to address patients' risk factors has been observed to reduce fall rates by 24% [20]. Today, we have accumulated data that can guide fall prevention programs and prevent fall-related injuries at different points along the care continuum [9]. As such, experts now recommend that physicians advise their patients to adopt evidence-based prevention strategies to reduce their risk of falling [20].

Research has shown that effective fall prevention requires patient-centered strategies that are proactive, multidisciplinary, and holistic and that incorporate details of a person's medical and psychological condition, as well as their social circumstances [5]. However, evidence points to a high risk of falling and sustaining fall-related injuries at home, and thus support care is needed in the home for those at highest risk of falling [37].

Appropriate support care can reduce morbidity, mortality, and costs associated with falls

The type of support care people receive significantly affects their health outcomes, and lack of the appropriate care has been established as a major risk factor for adverse events [38]. In the case of falls, support care can make the difference in preventing falls and the devastating sequelae. For example, in-home care may help to reduce the rehospitalizations in the month following hospital discharge, up to 15% of which are due to fall-related injuries [39].

Nurses can be trained to reduce the risk of falls, and data have shown that more falls occur when people are surrounded with nurses with fewer relevant skills [40,41]. There are several ways that nurses and other in-home care providers can help to reduce fall risk, including through facilitation of exercise, cognitive behavioral interventions, and environmental modifications. Balancing exercises and other exercise programs have been shown to reduce fall risk, while cognitive behavioral interventions have proven effective in reducing recurrent falls in those with cognitive impairments [20,42]. In addition, when occupational therapists have helped to modify older people's living environments, fall rates declined [42].

CONCLUSION

Though falls are a significant contributor to death, injury, health-related complications, and healthcare spending, adequate support care can enable evidence-based prevention to reduce the incidence of falls and to minimize the devastating consequences. Fall prevention is so critical today, particularly among the elderly, that guidance from the American Geriatrics Society and British Geriatrics Society (AGS/BGS) suggests screening everyone 65 years and older for their fall risk every year. In the same vein, Welcome to Medicare examinations requires fall risk assessments.

Though people who fall often become afraid of falling and more cautious, falling ironically enhances the risk for subsequent falls, and this domino effect of falls begetting more falls highlights the need to prevent falls from occurring in the first place. Because many falls, fall-related injuries, and fall-related costs occur in those who have previously fallen, effective prevention strategies that help people to avoid falls altogether could significantly improve health outcomes and reduce costs associated with falls. Support care should be systematically deployed to reduce the relevant risks in vulnerable populations.

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HIP FRACTURE
By Craig H. Lichtblau, M.D.

A hip fracture is a break that occurs in the upper part of the femur. Symptoms may include pain around the hip particularly with movement and shortening of the leg. Usually, with an acute hip fracture the patient cannot walk. Most hip fractures occur as a direct result of a fall.

Risk factors for hip fractures include: Osteoporosis, taking many medications, alcohol use and/or metastatic cancer.

The diagnosis of a hip fracture is obtained by x-ray, magnetic resonance imaging (MRI), and/or a CT scan. A bone scan may occasionally be required to make a confirmatory diagnosis. If the patient allows surgery it is usually recommended within two days.

Options for surgical intervention include: A total hip replacement or stabilizing the fractures with screws. Treatment to prevent blood clots is also recommended.

About 15% of women break their hip at some point in life. Women are more often affected than men. Hip fractures become more common with age. The risk of death in the year following a hip fracture is about 20% in the older population.

Signs and symptoms:

The classic clinical presentation of a hip fracture is an elderly patient who sustains a low energy fall and now has groin pain and is not able to bear weight on their lower extremity. Pain may be referred to the supracondylar aspect of the ipsilateral knee. On examination, the affected extremity is often shortened and unnaturally externally rotated compared to the unaffected leg.

Complications:

Non-union failure of the fracture to heal is common in fractures of the neck of the femur, but much more rare with other types of hip fracture. Avascular necrosis of the femoral head occurs approximately 20% in intracapsular hip fractures because the blood supply is interrupted. Malunion healing of the fracture in a distorted position is very common. The thigh muscles tend to pull on the bone fragments causing them to overlap and reunite incorrectly. Shortening, valgus deformity and rotational malunion all occur often because the fracture may be unstable and collapse before it heals. This may not be as much of a concern in patients with a limited independence and mobility.

Hip Fracture – continued

Hip fractures rarely result in neurological or vascular injury.

Medical:

Many people are unwell before breaking a hip. It is common for the break to have been caused by a fall due to some illness especially in the elderly. The stress of the injury and a likely surgery increases the risk of medical illness including heart attack, stroke and chest infection. Hip fracture patients are at considerable risk for thromboembolism. Thromboembolism is very common after a hip fracture as the circulation is stagnant and the blood is hypercoagulable as a response to the injury. Deep vein thrombosis can occur without causing a pulmonary embolus and patient that suffer from a hip fracture are at a great risk for pulmonary embolus especially if they have a deep vein thrombosis. Fatal pulmonary emboli may have an instance of 2% after a hip fracture and they contribute to illness and mortality of their cases.

Mental confusion is extremely common following a hip fracture. It usually clears completely, but the disorienting experience of pain and immobility, loss of independence, moving to a strange place, surgery and drugs combined may cause delirium or accentuate pre-existing dementia.

Urinary tract infections can occur. Patients are immobilized and for many days they are frequently catheterized commonly causing infection. Prolonged immobilization and difficulty moving make it hard to avoid pressure sores on the sacrum and heels of patients with hip fractures. Whenever possible early mobilization is advocated; otherwise, an alternating pressure mattress should be used.

Risk Factors:

A hip fracture following a fall is likely to be a pathological fracture. The most common causes of weakness in bone are: Osteoporosis, other metabolic bone diseases such as Paget's disease, osteomalacia, osteopetrosis and osteogenesis imperfecta.

Stress fractures may occur in the hip region with metabolic bone disease, elevated levels of homocysteine a toxic natural amino acid. Benign or malignancy primary bone tumors are rare causes of hip fractures. Metastatic cancer deposits in the proximal femur weaken the bone and may cause a pathological hip fracture. Infection is a rare cause of hip fracture. Tobacco smoking associated with osteoporosis.

Hip Fracture – continued

Neurologic Factors:
Elderly individuals are also predisposed to hip fracture due to many factors that can compromise proprioception and balance including medications, vertigo, stroke and peripheral neuropathy.

Diagnosis:
Physical examination: Displaced fracture of the trochanter or femoral neck will classically cause external rotation and shortening of the leg when the patient is lying supine.

Imaging: Typically radiographs are taken of the hip from the front, AP view and side lateral view, frog-leg views are to be avoided as they may cause severe pain and further displace the fracture. In situations where a hip fracture is suspected, but not obvious on x-ray, an MRI is the next test of choice. If the MRI is not available, the patient cannot be placed into a scanner, CT may be used as a substitute. MRI sensitivity for a radiographically occult fracture is greater than CT. A bone scan is another useful alternative; however, the substantial drawbacks include decreased sensitivity, early false negative results and decreased conspicuity of findings due to age-related metabolic changes in the elderly.

Types: X-rays of the affected hip make the diagnosis and the type of hip fracture to include: Intracapsular, extracapsular, femoral head, femoral neck, trochanteric and subtrochanteric. Of the femoral neck-type fractures it could be subcapital, transcervical and vasicervical. Trochanteric includes intertrochanteric (between the greater and lesser trochanter) and pertrochanteric through the trochanters and subtrochanteric (beneath the greater and lesser trochanter.

The majority of hip fractures are the result of a fall particularly in the elderly. Multiple contributing factors to the falls can often be identified. These can include environmental factors and medical factors such as postural hypertension or co-existing disabilities from disease such as a stroke or Parkinson's disease which cause visual and/or balance impairments. A recent study has identified a high incidence of undiagnosed cervical spondylitic myelopathy amongst patients with a hip fracture.

Management:
Most hip fractures are treated surgically by implanting prosthesis. Surgical treatment outweighs the risk of nonsurgical treatment which requires extensive bed rest. Pro-

Hip Fracture – continued

longed immobilization increases the risk of thromboembolism, pneumonia, deconditioning and decubitus ulcers. Regardless the surgery, the major stress particularly in the elderly, pain is also significant and can result in immobilization. The patients are encouraged to become mobile as soon as possible often with the assistance of physical therapy. Skeletal traction pending surgery is not supported by the evidence. Regional nerve blocks are useful for pain management in hip fractures.

A Cochrane Anesthesia Review Group reviewed peripheral nerve blocks for hip fractures in adults which demonstrated peripheral nerve blocks did reduce pain on movement and acute confusional state may improve time to reverse immobilization and may reduce the risk of postoperative low respiratory tract infection. Surgery can be performed under general anesthesia, neuro-axial techniques. Choices based on surgical and patient factors with outcomes such as mortality and post-procedure complications to include, but not limited to such as pneumonia, myocardial infarction, stroke and confusion are not affected by anesthetic technique.

Red blood cell transfusion is common for people undergoing hip fracture surgery due to blood loss sustained during surgery and from the injury. Giving blood when the hemoglobin is less than 10 grams per deciliter versus 8 grams per deciliter was of unclear benefit per a 2015 Cochrane review. A review in 2018; however, found that waiting until the hemoglobin was less than 8 grams per deciliter or the person had symptoms increased the risk of heart problems.

If operative treatment is refused or the risk of the surgery is considered to be too high, the main emphasis of treatment is on pain relief. Skeletal traction may be considered for long-term treatment. Aggressive chest physiotherapy is needed to reduce the risk of pneumonia and skilled rehabilitation and nursing to avoid pressure sores and deep vein thrombosis/pulmonary embolism as most people will be bed bound for several months. Non-operative treatment is now limited to only those medically unstable or demented patients or those who are non-ambulatory at baseline with minimal pain during transfers. Surgery on the same day or day following the break is estimated to reduce postoperative mortality in people who are medically stable.

Intracapsular Fractures:
For low-grade fractures, standard treatment is fixation of the fracture in situ with screws or a sliding screw/plate device. Treatment can also be offered for displaced fractures after

Hip Fracture – continued

the fracture has been reduced. Fractures managed by closed reduction can possibly be treated by percutaneously inserting screws.

In elderly patients with displaced or intracapsular fractures, many surgeons prefer to undertake a hemoarthroplasty replacing the broken part of the bone with a metal implant. However, in the elderly people who are medially well and still active, a total hip replacement may be indicated. Independently mobile older adults with hip fractures may benefit from a total hip replacement instead of a hemiarthroplasty.

Traction is contraindicated in femoral neck fractures due to it affecting blood flow to the head of the femur which puts the patient at an increased risk of avascular necrosis of the femoral head. The latest evidence suggests there may be little or no evidence between screws and fixed angle plates as internal fixation implants for intra-articular hip fractures in older adults.

Trochanteric Fracture:

A trochanteric fracture below the neck of the femur has a good chance of healing. Closed reduction may not be satisfactory and open reduction then becomes necessary. The use of open reduction has been reported as 8-13% among peritrochanteric fractures and 52% among intertrochanteric fractures. Both intertrochanteric and peritrochanteric fractures may be treated by a dynamic hip screw and plate or an intramedullary rod. The fracture typically takes three to six months to heal as it is only common in elderly patients. Removal of the dynamic hip screw is usually not recommended to avoid the unnecessary risk of a second operation and increased risk of re-fracture after implant removal.

The most common cause for hip fractures in the elderly is osteoporosis. If this is the case, treatment of the osteoporosis can well reduce the risk of further fracture. Only young patients tend to consider having the hardware removed. The implant may function as a stress riser or increase in the risk of a break if another action occurs.

Subtrochanteric Fracture:

A subtrochanteric fracture may be treated with an intramedullary nail or a screw plate construction and may require traction preoperatively. Though this practice is uncommon, it is unclear if any specific type of nail results in different outcomes than any other type of nail. A lateral incision over the trochanter is made and a cerclage wire is placed

Hip Fracture – continued

around the fracture for reduction. Once reduction has been achieved a guide canal for the nail is made through the proximal cortex and medullary. The nail is inserted through the canal and is fixated proximally and distally with screws. X-rays are then obtained to ensure proper reduction and placement of the nail and screws are achieved.

Rehabilitation:

Rehabilitation has been proven to increase daily functional status. 40% of individuals with hip fractures are also diagnosed with dementia or mild cognitive impairment which often results in poor postsurgical outcomes. In such cases, enhanced rehabilitation and care models have been shown to have limited positive affect in reducing delirium in hospital or rehabilitation facility length of stay.

Surgical Complications:

Deep or superficial wound infection has an approximate instance of 2%. This is a serious problem as superficial infection may lead to deep infection. This may cause infection of healing bone and contamination of the implants.

It is difficult to eliminate infection in the presence of metal foreign bodies such as implants. Bacteria inside the implants are inaccessible to the body's defense system with antibiotics. The management is to attempt to suppress the infection with drainage and antibiotics until the bone is healed. Then, the implant should be removed following which the infection may clear up.

Implant failure may occur if the metal screws and plate can break, back out or cut out superiorly and enter the joint. This occurs either through inaccurate implant placement or if the fixation does not hold in weak and brittle bone. In the event of failure the surgery may be redone or changed to a total hip replacement.

If there is malpositioning the fracture can be fixed and subsequently heal in an incorrect position especially rotation. This may not be a severe problem or may require subsequent osteotomy surgery for correction.

Prognosis:

Hip fractures are very dangerous episodes especially for the elderly and frail patients. The risk of dying from the stress of the surgery and injury in the first 30 days is about 10%. At one year after fracture this may reach 30%. If the condition is untreated, the pain and immobility imposed on the patient is increased at risk. Problems such as pressure sores and chest infections are all increased by immobility. The prognosis of untreat-

Hip Fracture – continued

ed hip fractures is very poor.

Post Operation:

Among those affected over the age of 65, 40% are transferred directly to long-term care rehabilitation facilities or nursing homes. Most of those affected require some sort of living assistance from family or home care providers. 50% permanently require walkers, canes or crutches for mobility; all require some sort of mobility assistance throughout the healing process. Most or the recovery of walking ability and activities of daily living occur within six months of the fracture. After the fracture, about half of older people recover to their pre-fracture level of mobility and ability to perform instrumental activities of daily living, while 40-70% regain their level of independence for basic activities of daily living. Among those affected over the age of 50, approximately 25% die within the next year due to complications such as blood clots, (deep vein thrombosis, pulmonary embolus), infections and/or pneumonia.

Patients with hip fractures are at high risk for future fractures including hip, wrist, shoulder and spine. After treatment of the acute fracture, the risk of future fracture should be addressed. Currently only one in four patients after a hip fracture receives treatment and workup for osteoporosis, the underlying cause of most of the fractures. Current treatment standards include the starting of bisphosphonate to reduce future fracture risk by up to 50%.

Epidemiology:

Hip fractures are seen globally as a serious concern at the individual and population level. By 2050 it is estimated there will be six million cases of hip fractures worldwide. One study published in 2001 found that in the United States alone 310,000 individuals were hospitalized due to hip fractures which can account for 30% of Americans who were hospitalized that year.

Another study in 2011 found that femur neck fractures were among the most expensive conditions seen in U.S. hospitals with an aggregated cost of nearly $4.9 billion for 316,000 inpatient hospitalizations. Rates of hip fractures are declining in the United States possibly due to increased use of bisphosphonates and risk management. Falling, poor vision, weight and height are all seen as risk factors. Falling is one of the most common risk factors for hip fractures. Approximately 90% of hip fractures are attributed to falls from standing height.

Hip Fracture – continued

Population:

All populations experience hip fractures, but numbers vary with race, gender and age. Women suffer three times as many hip fractures as men. In a lifetime men have an estimated 6% risk where post-menopausal women have an estimated 14% risk of suffering a hip fracture. The overall whelming majority of hip fractures occur in white individuals while blacks and Hispanics have a lower rate of hip fracture. This may be due to their generally greater bone density and also whites have longer overall lifespan and a higher likelihood of reaching an advanced age where the risk of breaking a hip goes up.

Age Related:

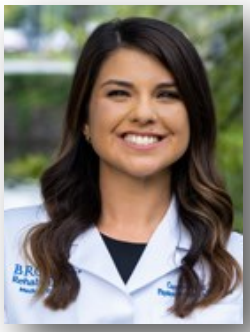
Age is the most dominant factor in hip fracture injuries with most cases occurring in people over 75 years of age. Increase of age is related to the increase of the incidence of hip fracture which is the most frequent cause of hospitalization in centurions overcoming congestive heart failure and respiratory infection.

Falls are the most common cause of hip fractures and around 30-60% of older adults fall each year. This increases the risk of hip fracture and leads to the increased risk of death. In older individuals, the rate of one year mortality is seen from 12-37%. For those remaining patients who do not suffer from mortality, half of them need assistance and cannot live independently. Also, older adults sustain hip fractures because of osteoporosis which is a degenerative disease due to age and decrease in bone mass. The average age of suffering a hip fracture is 77 years old for women and 72 years old for men.

Physiatrist's Voice
NEWSLETTER DECEMBER 2021

Review of Spasticity Management

By Cassandra List, MD
Neurorehabilitation and Spasticity Management
Medical Director, Stroke Rehabilitation
Brooks Rehabilitation Hospital,
Jacksonville, FL



As a resident, you did not experience the full glory of a neurorehabilitation rotation if you did not have at least one attending quiz you on the definition of spasticity. It was defined by JW Lance as "a motor disorder characterized by a velocity-dependent increase in tonic stretch reflexes with exaggerated tendon reflexes, resulting from excitability of the stretch reflexes." The key feature of the definition is the velocity-dependent increase in tone that can result from damage to the central nervous system (CNS). Derived from the Greek word *spasticos*, spasticity is thought to have first been used in English in 1829 as a description of what we now recognize to be spasmodic torticollis. Spasticity is often described by patients and/or their caregivers as "stiffness" or "tightness" of the muscles. In this article, we will review the common patterns of spasticity as well as spasticity management options.

Common Patterns of Spasticity

Any patient with CNS/upper motor neuron damage is vulnerable to developing spasticity. Stroke, traumatic and non-traumatic brain and spinal cord injuries, cerebral palsy, and multiple sclerosis are the most frequent diagnoses seen by Physical Medicine and Rehabilitation physicians for spasticity management. Spasticity can start to develop as early as within a few days after CNS damage or as late as a few months.

Common patterns for the development of spasticity are the shoulder adducted and internally rotated, flexion at the elbow with forearm pronation, wrist and finger flexion at the proximal and distal interphalangeal joints with thumb tucked into the palm. Lower extremity spasticity patterns include hip adduction with scissoring gait, knee flexion or extension, equinovarus foot, and either striatal toe or toes curled/flexed.

Review of Spasticity Management – continued

Spasticity Assessment

Though there are common patterns of spasticity, each individual's spasticity and how it impacts their function is highly unique. Even with similar areas of CNS lesions or spastic patterns, patients may have different functional abilities or goals. It is important, therefore, to take an individualized approach to each patient's spasticity management plan. Depending on how early in the recovery journey, the spastic pattern may change with time and ongoing rehabilitation. Therefore, each spasticity management visit should review the current level of function and include a spasticity exam.

The spasticity assessment should begin with a comprehensive functional history that includes the current level of function and caregiver involvement, if any. Open-ended questions allow the patient and/or caregiver to volunteer examples of when the spasticity is interfering with their function. However, directed questions can help not only the physician learn more about the patient's problematic spasticity, but also allow an opportunity for education to the patient about how spasticity may be contributing to some of their functional impairments. Some examples of helpful questions to ask in a focused history are:

- "Do you feel any muscle tightness in the chest and shoulder region? Is it difficult to put on or take off your shirt due to the arm being tight to your chest? Is it difficult to open your arm up enough to clean in the underarm region?"
- "Is it difficult to stretch your arm out in order to clean in the elbow crease?"
- "Is it difficult to stretch the fingers out in order to clean the hand or cut your fingernails? Do your fingernails dig into the skin of your palm because they are so tight?
- "Does your leg cross over (scissor) involuntarily?"
- "Do you catch your foot or does your foot turn in when you walk?"
- "Is it difficult to put on your shoes because the foot is pointed down? Does your heel sit properly in the shoe or AFO?"

"Do you find that your legs will bounce or shake (clonus) when you transfer in and out of the wheelchair?"

Review of Spasticity Management – continued

Alternatively, some patient may use their spasticity to their benefit in order to facilitate functional tasks. Asking open ended questions such as "What do you currently use (the spastic hand) for?" allows the patient to identify tasks that they are doing despite the spasticity. For example, a patient with spastic hemiparesis after stroke may use the spastic tone of their hand to hold a water bottle or a jar while using their non-affected hand to twist the lid open. By addressing the spasticity and relaxing the finger flexors, the patient may actually lose their ability to grip the water bottle and, therefore, lose function. Similarly, a patient with spastic paraparesis after spinal cord injury may use the spastic tone in their lower extremities to help bear weight during a wheelchair transfer. Relaxing these muscles may make it more difficult for the patient to transfer independently.

The physical examination should include as much functional observation as possible, such as having the patient walk or observing the patient transfer from the wheelchair to the exam table. Manual muscle testing is recommended, followed by measurement of spasticity. Clinical objective measures of spasticity most commonly include the Ashworth Scales (Ashworth scale, Modified Ashworth Scale), though the Tardieu scale and other objective measures such as formal gait analysis may also be used. [1]

Review of Spasticity Management – continued

DESCRIPTION OF THE ASHWORTH AND MODIFIED ASHWORTH SCALES

Score	Ashworth Scale (6)	Modified Ashworth Scale (7)
0	No increase in tone	No increase in tone
1	Slight increase in tone giving a catch when the limb is moved in flexion/extension	Slight increase in tone giving a catch, release, and minimal resistance at the end of ROM when the limb is moved in flexion/ extension
1+		Slight increase in tone giving a catch, release, and minimal resis- tance throughout the remainder (less than half) of ROM
2	More marked increase in tone, but the limb is easily moved through its full ROM	More marked increase in tone through most of the ROM, but limb is easily moved
3	Considerable increase in tone—passive movement difficult and ROM decreased	Considerable increase in tone—passive move- ment difficult
4	Limb rigid in flexion and extension	Limb rigid in flexion and extension

Brashear, A. (2016). Spasticity: Diagnosis and management (2nd ed.). Demos.

Review of Spasticity Management – continued

Spasticity Management

There are several options for spasticity management with a brief overview below. It is likely that a combination of these options would be appropriate to use for any given spastic patient.

Therapy, stretching, and home exercise programs

Bracing: resting or dynamic splints, AFOs, serial casting

Oral medications:

There are several oral spasticity management medications used for generalized spasticity. The most commonly used medication is Baclofen which acts as a GABA-B receptor agonist. The peak effect of Baclofen is 2 hours after ingestion and it is usually titrated to be dosed 3-4 times per day. Common side effects include lethargy, cognitive slowing, memory impairments or confusion. Other centrally acting oral antispasmodics include Tizanidine, methocarbamol, cyclobenzaprine and benzodiazepines such as diazepam which have similar side effect profiles to Baclofen. If CNS side effects are prominent, dantrolene is a peripherally acting skeletal muscle relaxant which has no known central effects. However, it is important to monitor hepatic function levels when a patient is on dantrolene with recommendation for baseline labs prior to initiating treatment, and interval monitoring of LFTs after starting dantrolene.

Cannabinoids: Though the research is growing, currently there is insufficient evidence to recommend cannabinoids for spasticity management. Patients will anecdotally report benefit, however.

Phenol and Alcohol Chemoneurolysis

Though still used today, phenol and alcohol chemoneurolysis were more commonly used before the introduction of botulinum toxins (BoNTs) for management of spasticity. Phenol and Alcohol have an immediate onset of action and can be dosed frequently if the

desired effect is not achieved as opposed to BoNT injections where the suggested interval between injections is at least 3 months (see below). The expected duration of effects from peripheral nerve phenol neurolysis ranges from 10 days to 28 months. The most common distinguishing potential side effect of phenol neurolysis compared to BoNT is the potential for dysesthesias when a mixed motor and sensory nerve is targeted.

Botulinum Toxin Injections

There are currently four commercially available BoNTs, each with variable FDA approval for spasticity and dystonia. BoNT are used to address focal, multifocal, or regional spasticity.[3]

Botulinum Toxin-A

Onabotulinumtoxin-A (BOTOX; Allergan)

Incobotulinumtoxin-A (Xeomin; Merz Pharmaceuticals)

Abobotulinumtoxin-A (Dysport; Ipsen)

Botulinum Toxin-B

RimabotulinumtoxinB (Myobloc; Supernus Pharmaceuticals)

BoNTs work by preventing the release of acetylcholine from the presynaptic nerve terminal. This blocks transmission at the neuromuscular junction, reduces muscle contraction and hence, spasticity. BoNT takes effect gradually, starting about 4-7 days after injections, peak effect at 4-6 weeks, and lasts 2-4 months. It is generally recommended that there be at least a three month interval between BoNT injections to minimize risk of developing immunizing antibodies. Physicians should use the spasticity history, physical, and BoNT dosing guidelines to target problematic focal/multifocal spasticity to optimize function.

Intrathecal Baclofen Pumps (ITB Pumps)

ITB pumps are used in the management of regional and generalized spasticity. ITB pumps are baclofen infusion pumps that are surgically implanted into the subcutaneous tissue, usually of the abdomen, with a catheter threaded to the spine to deliver Baclofen to

the intrathecal space. ITB infusion delivers Baclofen through the CSF to the CNS in microgram doses (as opposed to milligram doses of oral systemic Baclofen). As there is no systemic administration along with lower and more targeted dosing, the common side effects of oral Baclofen such as sedation are commonly avoided.

Generally speaking, ITB therapy reduces lower limb spasticity more than upper limb, however, the higher the catheter, the more effect ITB therapy can have on upper limb spasticity. Creamer et al. did note in the *SISTERS* study a significant treatment effect with ITB over conventional medical management for upper extremity spasticity, consistent with two previous studies that showed a decrease from baseline in muscle tone in the upper limb with ITB therapy.

Also, ITB pumps are often overlooked in post-stroke spasticity management due to concern for weakening of the unaffected side. However, studies have shown that ITB therapy can be beneficial in post-stroke spasticity, decreasing upper and lower limb spasticity without affecting the non-spastic side of the body.[6]

A pre-implant ITB trial is commonly done where a lumbar puncture is performed and a bolus of usually 50mcg of Baclofen solution is given. The patient is then monitored up to 6-8 hours post ITB for assessment of functional response and benefit from ITB.

There are currently two ITB pump options, Medtronic's Synchromed II and Flowonix Prometra II pump. Medtronic Synchromed II has a pump replacement interval of 4-7 years for end of battery life whereas Flowonix Prometra II pump is 10 years. The Medtronic Synchromed II pump is MRI compatible and allows safe full-body MRI scan with the pump designed to resume therapy automatically after the scan. With the Flowonix Prometra II pump, it is recommended that the drug be removed from the reservoir prior to having an MRI.

Complications may arise from ITB pump therapy including operative complications, pump complications, catheter complications and human error with pump programming or refill error, including subcutaneous refill rather than pump refill. ITB pump candidates need to have consistent attendance to clinic appointments and reliable transportation as missing an ITB refill appointment can result in ITB withdrawal, which may be life threat-

ening. Patients should be encouraged to always carry their pump ID card. They should keep an unexpired supply of oral Baclofen at home to take under physician direction in case of pump complications to minimize risk of withdrawal.

Direct surgical interventions for spasticity management are beyond the scope of this article but include muscle/tendon lengthening and transfers, neurectomies, and posterior rhizotomies.

Like many areas of medicine, spasticity management can be vulnerable to scrutiny by medical payers. Often, additional prior authorizations or letters of medical necessity will need to be provided to justify the interventions noted. Even then, it can be difficult to obtain the appropriate treatment interventions. As an example, Florida BlueCross BlueShield is unlikely to approve more than 400 units of Botox or Xeomin for spasticity despite evidence showing that doses above 400 units can be safe and beneficial for spasticity management in the appropriately identified patient.[7] Though it can be cumbersome and time consuming, it is important that we continue to advocate for approval of appropriate spasticity management interventions and resources for our patients.

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Physiatrist's Voice
NEWSLETTER DECEMBER 2021

EMG CORNER
The EMG Report
by
Paulette Smart-Mackey, MD

The EMG Report

The EMG report is a summary of the patient encounter and the neurophysiologic findings. It contains a logical and reasonable clinical diagnosis based on data design and analysis, with recommendations and concluding statements. It's a meaningful way to communicate the diagnosis and neurophysiology of a patient's condition to the referral source. It also conveys the EMG/NCS data collected in a narrative or table format. It can be considered a marketing tool for you as the electromyographer since it contains your name, address, and signature.

The Objective

The objective of the EMG report is to assist the referral source with a diagnosis that gives insight into a patient's condition. The information provided might alter the course of the patient's medical management long-term and the path to recovery. Many people read these reports, not just the referring doctors: medical specialists, surgical specialists, medical residents, students, insurance companies, chart reviewers, NPs, PAs, disability claims managers, work comp managers, and peer reviewers. The reader deserves a simplified high-quality EMG report that they can understand and appreciate.

The Problem with the EMG Report:

Here is an excerpt from an email correspondence received from one of the Natus Education Academy global EMG conference attendees on June 24, 2021. I had the great honor of being the speaker. The webinar was entitled *"The Shocking Truth About EMG Report Generation and Analysis."*

You don't believe it, but we get EMG reports like 15 pages etc... 65 findings…. makes it too complicated to read.

The Solution For Generating Readable EMG Reports:

The EMG Report – continued

I agree with this attendee that most EMG reports issued are complex and that reading and comprehending them is confusing. I also agree that some of the EMG machine software might be a factor. The solution is to engineer high-quality reports that reflect the basic process of electrophysiologic diagnosis and analysis.

I propose nine simple components for the EMG report which might be helpful for the new electromyographer, and give tips to the already seasoned ones:

EMG clinic, physician and patient demographics
Brief patient history with the reason for referral
Brief physical exam
Nerve conduction studies with data and waveforms
Summary of nerve conduction studies
Needle Electromyogram with data and table
Summary of needle electromyogram findings
Interpretation (with discussion and conclusion) of EMG/NCS findings
Recommendations (if consultation pursued)

Discussion:

I hope this is a teaser for all members of the FSPMR to think about the vast reach of their EMG reports and include these components in their report generation. The principal goal is to communicate meaningful messages to the reader using simple formats. Generating high-quality reports depends on the examiner's expertise in analyzing and interpreting the EMG/NCS data, being mindful of accuracy and errors. But above all, the electromyographer should realize that the EMG report influences an examiner's reputation especially in today's society where the reach is both national and global with technology.

Physiatrist's Voice
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FSIPP | FSPMR
2022 CONFERENCE

Did you miss attending the meeting last July? Well, we are in the planning stages for next year! Mark your calendars and Save the Date for another great Conference!

This is a great time to network, meet colleagues and have time to talk with vendors.

JUST RELEASED:

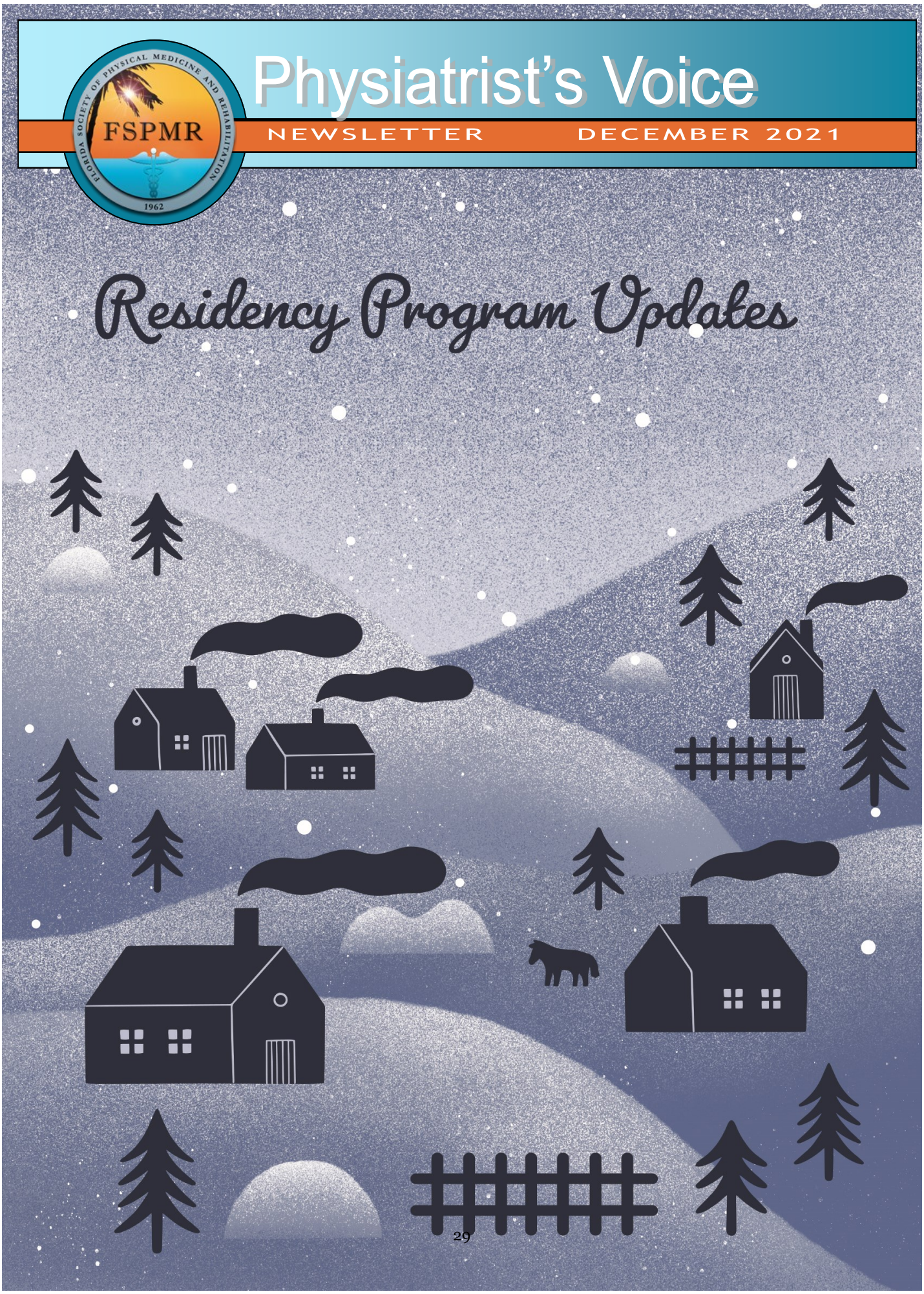
The rooms at the group rate now available for booking!

You can find the link on the FSPMR.ORG website under EVENTS, hit the Book Now button.

Book Now

Physiatrist's Voice
NEWSLETTER DECEMBER 2021

Residency Program Updates



Physiatrist's Voice
NEWSLETTER DECEMBER 2021

University of Miami Miller School of Medicine/Jackson Memorial Hospital
PM&R Residency Update
Edwin Amirianfar MD , Resident Liaison
Chane Price MD Residency Program Director


Edwin Amirianfar MD

¡Bienvenidos a Miami!

We are officially 1/3rd of the way through the academic year!

There are many exciting announcements from our residency. First off, we would like to congratulate our PGY-4s who have already matched into their fellowships for the 2022-2023 academic year:

Richard Rosales, MD who matched at Vanderbilt for his Sports & Spine Fellowship

Armando Alvarez, MD who matched at Dartmouth for his Pain Fellowship

Michael Appeadu, MD who matched at Emory for his Pain Fellowship

Physiatrist's Voice
NEWSLETTER DECEMBER 2021

University of Miami Miller School of Medicine/Jackson Memorial Hospital
PM&R Residency Update
Edwin Amirianfar MD , Resident Liaison
Chane Price MD Residency Program Director
-continued

In late October, we had a department wide Halloween event, which included costume competitions among our different floors and our residents.

We are also welcoming our new Spinal Cord Injury and Cancer Rehabilitation Fellows who will be starting in August 2022:

Dr. Yingrong Zhu, MD – Cancer Rehabilitation

Dr. Zackery Billington, DO – Spinal Cord Injury

Dr. Austin Henke, DO – Spinal Cord Injury

Interview season is here and we are looking forward to meeting all the competitive applicants who are interviewing with our program! The secret of our wonderful field is out and we have seen that with the number of applications received.

Our UMiami *UrPM&R podcast* by our PGY-4 Armando Alvarez is still going strong! In his latest episode he interviews our new leadership, Dr. Price and Dr. Molinares. Be sure to check it out!

Physiatrist's Voice
NEWSLETTER DECEMBER 2021

University of Miami Miller School of Medicine/Jackson Memorial Hospital
PM&R Residency Update
Edwin Amirianfar MD , Resident Liaison
Chane Price MD Residency Program Director
-continued

By the time this newsletter is published, the November Annual AAPM&R Assembly will have occurred and our residents will have made their poster and oral presentations that were accepted. We also look forward to the many abstracts accepted by our department to be presented at the Annual AAP meeting in 2022!

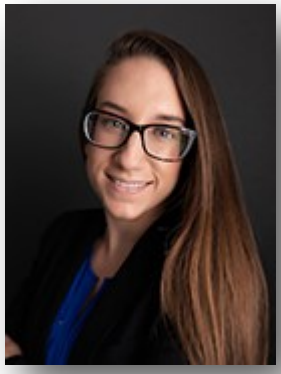
Last but not least, we have to congratulate one of our PGY-4 residents, Richard Rosales, who welcomed his newborn son, Noah, in October!

Physiatrist's Voice
NEWSLETTER DECEMBER 2021

Memorial Healthcare System PM&R Residency Program

Dr. Yvette Little PM&R Resident Liaison to FSPMR
Jeremy Jacobs DO, Residency Program Director

Memorial Healthcare System



Dr. Yvette Little

Greetings from Hollywood Florida, My name is Yvette Little. I am currently a PGY2 PMnR resident at Memorial Healthcare System and will be the new FSPMR Liaison. Below, we have some exciting updates to share with you.
PGY 4 Update: Congratulations to Dr. Abhinav Mohan who matched into Pain Medicine at University of Washington and Dr. Steven Tijmes who matched into Pain Medicine at Louisiana State University. They have worked incredibly hard and we are very excited for them both.
Below are poster presentations presented by our PMnR residents and faculty:
AAPM&R

Early Diaphragmatic Pacer Use in an Incomplete Quadriplegic Patient: a case report
Andres Gutierrez Robles, MD and Joanne M. Delgado-Lebron, MD
ASRA

Retrodiscal Transforaminal Epidural Injection for Discogenic Pain: A Case Report
Noushad Mamun DO, Andres E Gutierrez Robles MD, Abhinav Mohan MD and Jackson Cohen MD

Below are poster presentations accepted that will be presented at next year's AAP conference:
Malice of Chondromalacia. Uday Mathur MD, Marvin Smith MD and Jackson Cohen MD
The Detrimental Effect of an Incidentally Positive Covid-19 test on a Rehabilitation Course.
Ellen Dzierzak, DO and Joanne Delgado-Lebron, MD
Remarkable Rehabilitation of Transtibial Amputee with Severe Central Canal Stenosis.
Amanda Hargrove, DO and Jacobs Jeremy, DO
Multiple Acute Ischemic Infarcts in the Setting of COVID 19 Infection.
Yvette Little ,DO and Raul Humberto Rolon Torres, MD

In addition, Dr. Matthew Voelker PGY3 presented at the Virtual Miami amputee support group on importance of establishing PM&R care. He is also currently completing his quality improvement project on appropriate initial amputee evaluation for acquisition of prosthesis.

We also have been attending our monthly ultrasound workshop led by Dr. David Valdes.

Your MHS PM&R Family in Hollywood!

Physiatrist's Voice
NEWSLETTER DECEMBER 2021

West Florida Hospital /UCF PM& R residency Program
Zeeshan Haque, MD PGY-2


Zeeshan Haque MD,

Hello all, I hope you all had a wonderful Thanksgiving! We are now several months into the start of our new program and have all now successfully settled in. From a wellness standpoint, we have started our "IMAX with the Professor" program where Dr. Buchalter treats us to an IMAX movie once a month. So far, we have seen "No Time To Die" & "The Eternals."

We were also lucky enough to not be heavily impacted by Hurricane Ida a few months ago. Unfortunately, as you may have heard, Louisiana was not as lucky. Dr. Burton was kind enough to take the initiative to accept a transfer of several patients from Louisiana to our acute inpatient rehab hospital to aid with the continuation of these patients' rehab course & care. Our two residents on outpatient rotations, Dr. Gill & Dr. Tran, were also kind enough to volunteer and join myself & Dr. O'Leary on the inpatient side for a couple of days to help make the transfer process as smooth as possible.

In terms of our didactics, we have been lucky enough to have several wonderful guest lecturers join us and give some wonderful & insightful presentations. Dr. Ahmed gave a lecture on the "Foot and Ankle", Dr. Biery presented on "Low Back Pain, Shoulder Pain, OMT", & Dr. Crown gave a lecture on "Neuropsychological testing." All of our morning didactics sessions were also available for medical students to attend via zoom!

Our program leaders have also started to interview candidates to become a part of our residency faculty. There are also plans to have a simulation lab built for resident education. This is projected to be completed next year. In terms of case reports, Dr. Tran, Dr. Gill, & Dr. Haque are currently working on a Neurosarcoidosis case report with Dr. Cahill (Neurology).

I wish you all a safe & happy upcoming holiday season!

Zeeshan Haque, MD PGY-2

West Florida Hospital/UCF PM&R Residency Program

Physiatrist's Voice
NEWSLETTER DECEMBER 2021

Larkin Community Hospital PM&R Residency Update

Arun Zachariah DO Resident Liaison
Jose J. Diaz, DO, Residency Program Director

Arun Zachariah DO

Hello from Larkin Community Hospital! The first-half of the year is almost done; it's always unbelievable with how fast time flies. I have lot of exciting news to share! First, congratulations to all of the seniors that have matched recently into SCI, Pain and Cancer fellowships. Four of our own PGY-4s have matched into pain/interventional spine fellowships. Vidur Ghantiwala, DO, Eric Lam, DO matched Pain at UVermont and Larkin respectively, while Aleks Pecherek, DO, Alan Nguyen, DO, matched The Sports and Spine Center in Houston and Cantor Spine institute respectively. Eileen Slavin matched Cancer at Georgetown.

Charlie Woo, DO recently presented at AAPMR with a project titled "Platelet-Rich Plasma Injection in Extensor Tendon in Proximal Interphalangeal Joint for Pain and Sensitivity", which has also been accepted and published in the The Journal of Pain Management and Medicine

One of our alumni, Ala Elyaman, DO, graduated last year and is completing a Parkinson's Disease and Movement Disorders Neurorehabilitation Fellowship at the Shirley Ryan Ability lab. The program is currently looking for a new fellow for the upcoming year. I have attached a link to the program with further description.

https://www.feinberg.northwestern.edu/sites/pmr/education/fellows/parkinsons-rehabilitation/index.html

The main contact for more information is

Dr. Jennifer Goldman, MD (Program Director)
jgoldman02@srlab.org

We wish everyone happy and safe holiday season!

Physiatrist's Voice
NEWSLETTER DECEMBER 2021

University of South Florida PM&R Residency Update

Kareem Qaisi DO , Resident Liaison
Marissa McCarthy, MD, Residency Program Director

Kareem Qaisi DO

wishing you

PEACE & JOY

Physiatrist's Voice
NEWSLETTER DECEMBER 2021

Professional Opportunities

December 2021

Opportunities:

Southeastern FL. Pelvic Rehab Medicine Be at the forefront of this specialized medicine. Training will be provided. This rapidly-growing field offers much professional growth. Comfortable lifestyle with 8-hour days and no call.

St. Augustine, FL. Medical Director, Rehab. Brand-new 40 bed acute inpatient rehab hospital slated to open 2/28/2022. Enjoy the advantages of an independent contractor affiliation. Income guarantee PLUS a Medical Director Stipend PLUS your professional receipts.

Other opportunities include an outpatient practice purchase in Palm Beach; a pelvic rehab medicine in Palm Beach; inpatient in Melbourne, Fort Pierce, Broward and Vero Beach; subacute in Ocala and Sarasota; and remote nurse practitioner supervision statewide. Just added Tallahassee!

Contact Linda Farr, Farr Healthcare, Inc.,
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Physiatrist's Voice

NEWSLETTER DECEMBER 2021

Deadline for our next issue is

FEBRUARY 15th for our March 2022 Newsletter

Guidelines for your articles are available on the website: FSPMR.org/newsletters Here a few for your convenience;

- Pictures: should be in .jpg or .gif format. All files must have minimum resolution of 72 dpi. (max. 300) with a image size no larger than: 1500 px x 900 px
- Documents should be submitted in electronic format (.docx). If a PDF is to be submitted, each page must be submitted separately.
- All articles will be approved by Web site committee editors.
- FSPMR will retain full editorial rights to any submissions.

Newsletter Disclaimer:

Articles in this newsletter are not an endorsement of acceptance by the Florida Society of Physical Medicine and Rehabilitation. They are published as a service to the author for the benefit of members.

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