Injection Therapies for Musculoskeletal Injuries
Sickle Cell Trait in Athletes
Sideline Medicine for the Team Physician: Stabilization of the Cervical Spine Injured Athlete
Musculoskeletal Ultrasound
Key Elements of the Preparticipation Physical Exam
Pushed to the Limit: Overuse Injuries in Children and Adolescents
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MEDICAL MUTUAL
Liability Insurance Society of Maryland
contents

FEATURES

12 Injection Therapies for Musculoskeletal Injuries
   by Brian Corwell, M.D.

14 Sickle Cell Trait in Athletes
   by Lindsay Jones, M.D. and Leone Prao, M.D.

15 Sideline Medicine for the Team Physician:
   Stabilization of the Cervical Spine Injured Athlete
   by Andrew Tucker, M.D.

17 Musculoskeletal Ultrasound
   by Valerie E. Cothran, M.D.

18 Key Elements of the Preparticipation Physical Exam
   by James Baronas, M.D.

20 Pushed to the Limit: Overuse Injuries in Children and Adolescents
   by Amy Valasek, M.D.

DEPARTMENTS

4 Board of Directors, Commissions and Committees

5 President
   Taking Our Voices to Capitol Hill
   by Yvette Oquendo-Berruz, M.D.

8 Editor
   Primary Care Sports Medicine
   by Yvette L. Rooks, M.D.

10 Executive Director
   New MAFP Online CME:
   Board Responds to Member Requests
   by Esther Rae Barr, CAE

11 Calendar

16 CME Quiz

23 Letter
   Track of Life: What Goes Around, Comes Around
   David W. McClure, M.D.

25 Membership

Mission Statement
To support and promote Maryland family physicians in order to improve the health of our State’s patients, families and communities.
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Taking Our Voices to Capitol Hill

Yvette Oquendo-Berruz, M.D.

Let me say thank you to my great colleagues in our day on the Hill. It was very informative and good to see the overwhelming majority of our federal representatives so supportive of primary care issues during a time of health transitions.

Matthew T. Burke, M.D.
MAFP Member

The 2013 AAFP Family Medicine Congressional Conference was held May 14-15 in Washington DC. This year’s conference produced a record attendance of over 200 which included medical students, Family Medicine residents, faculty from Family Medicine training programs and practicing family doctors from across the nation.

The Maryland Chapter had a robust delegation of 9 in total. Accompanying me were Drs. Kisha Davis, Mathew Burke, Miki Darling, Jamal Fadul, George F. Leon, Fatmatta Kuyateh, Marshala Lee. We were able to visit 7 out of the 8 districts Representatives; Congressmen Harris, Ruppersberger, Sarbanes, Hoyer, Delaney, Cummings and Von Hollen and one of the two Senators; Sen. Cardin.

The purpose of our Congressional visits was to get support on 3 key issues important to Family Medicine (2 of these issues relate to workforce training):

First, we asked that Congress supports the appropriation of at least $71 million for Title VII Primary Care Training an Enhancement (Section 747) administered by the Health Resources and Services Administration (HRSA). These particular grants are the only direct federal support for the education and training of family physicians. We requested at least $434 million for the Agency for Healthcare Research and Quality. We also asked that Congress provide at least $305 million for the National Health Service Corps which provides scholarships and loan repayment to medical students who will pro-

continued on page 6
provide primary care to underserved Americans. This helps to address medical school debt burdens which often precludes students choosing careers in Family Medicine.

Second, we requested reauthorization of the Teaching Health Centers (THC) programs administered by HRSA. This program supports an increased number of primary care medical residents who train in community settings rather than urban teaching institutions. The program will run out of funds before those residents admitted this July could complete their 3-year training. We encouraged that Congress provides a sustainable funding stream such as Medicare Graduate Medical Education modified to fit this particular training program.

Our third “ask” is the repeal of the SGR (Sustainable Growth Rate). We advocate that updated fee schedules include a higher payment for primary care physicians and that is key to make permanent the Medicare Primary Care Incentive payment and that Medicaid’s payment for primary care services is at least equal to that of Medicare, thus demonstrating that this Nation values and recognizes the importance of Primary Care.

This opportunity afforded to our Maryland Chapter (and all AAFP chapters) delegation to visit with our State’s elected leaders is key in making them aware of the importance of maintaining and increasing a strong Family Medicine workforce. It is even more important in today’s Congress when everything has become so polarized; some being quick to forget that they were elected to represent the PEOPLE and not their personal interests.

Congress needs a constant reminder of what is important to help fix the way health care is delivered in this country and this is why it is critical that we Family Physicians support FamMedPAC – AAFP’s Political Action Committee that will keep us at the TABLE so we do not become part of the MENU! Join Club George for $1 a day to keep us at the TABLE where our voices can be heard!!

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Note: Dr. Yvette Rooks is Executive Vice Chair and Program Director, Department of Family and Community Medicine, University of Maryland School of Medicine in Baltimore and Head Team Physician, University of Maryland at College Park. At her suggestion to the MAFP Editorial Board, volunteering to be guest editor, we present this edition dedicated to Primary Care Sports Medicine.

A MAFP Past President (2008-10) and current Alternate Delegate from our Chapter to the AAFP Congress of Delegates, Dr. Rooks is a member of the AAFP Commission on Health of the Public and Science, an architect of AAFP’s Americans In Motion-Healthy Interventions (AIM-HI) Initiative, and is a Board Member for the College Athletic Trainers Society.

All Americans should be regularly physically active to improve overall health and fitness and to prevent many adverse health outcomes. The benefits of physical activity occur in generally healthy people, in people at risk of developing chronic diseases, and in people with current chronic conditions or disabilities. Physical activity affects many health conditions, and the specific amounts and types of activity that benefit each condition vary. In developing public health guidelines, the challenge is to integrate scientific information across all health benefits and identify a critical range of physical activity that appears to have an effect across the health benefits. One consistent finding from research studies is that once the health benefits from physical activity begin to accrue, additional amounts of activity provide additional benefits.

As people increase their physical activity they will have concerns about the amount of exercise, types of exercise and may have injuries or specific medical conditions associated with their level of activity. Primary Care Sports Medicine physicians are physicians with primary training in a variety of fields including Family Medicine, Internal Medicine, Pediatrics, Emergency Medicine or Physical Medicine & Rehabilitation, which they then pair with an additional one to two years of specialized, fellowship training in Sports Medicine. A Primary Care Sports Medicine physician’s specialized training includes promoting lifelong fitness and wellness, and encouraging injury prevention. Primary Care Sports Medicine physicians help to minimize disability and time away from sport, work, or activity. These physicians may also be members of a multi-disciplinary sports medicine team which may also include surgeons, athletic trainers, physical therapists, coaches and the active individual. Primary Care Sports Medicine physicians not only take care of organized athletes but also provide care for people who participate in recreational athletics or simply enjoy an active lifestyle. Specializing in the treatment of athletes and other physically active individuals, they have extensive education in musculoskeletal medicine.

Primary Care Sports trained physicians have unique training which affords them the greatest exposure to treat any medical conditions which regular exercisers or sports persons encounter. Although the majority of a Primary Care Sports Medicine Physicians’ time is spent treating musculoskeletal injuries, other conditions include Female athlete triad, Unexplained Underperformance Syndrome, Exercise-induced asthma, screening for Cardiac Abnormalities, Diabetes in Sport. In addition Team Physicians working in Elite/Professional Sport often play a role in performance medicine, whereby an athletes’ physiology is monitored, and aberrations corrected, in order to achieve peak physical performance. Primary Care Sports Medicine physicians also deliver clinical physical activity interventions, negating the burden of disease directly attributable to physical inactivity and the compelling evidence for the effectiveness of exercise in the primary, secondary and tertiary prevention of disease.

Here in Maryland we benefit from having a Primary Care Sports Medicine Fellowship that is sponsored by the University of Maryland Department of Family and Community Medicine/UMMC and Union Memorial Hospital Sports Medicine/Medstar Sports Medicine. The faculty and graduates of the program serve locally as Professional and College Team Physicians, musculoskeletal specialists and are referral consultants for concussion injuries, performance enhancement and exercise medicine.
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Executive Director

New MAFP Online CME
Board Responds to Member Requests

Many MAFP Active members will recall a survey from earlier this year where the MAFP Board sought direct member input about the organization’s current, and possible expansion of, MAFP’s educational offerings. Responses were interesting and compelling… enough to cause the Board to act. We appreciate your participation and honesty:

Survey results guided the Board’s decision, at its meeting in February, to approve a New MAFP Online CME Program:

Survey Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Replied Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you aware of MAFP’s CME Requirement for Active members?</td>
<td>96%</td>
</tr>
<tr>
<td>Are you aware of MAFP’s CME Conferences in February (1-day) and June (2.5 days)?</td>
<td>89%</td>
</tr>
<tr>
<td>Have you ever attended MAFP’s Winter Conference held in February?</td>
<td>54%</td>
</tr>
<tr>
<td>Have you ever attended MAFP’s Annual CME Assembly held in June?</td>
<td>56%</td>
</tr>
<tr>
<td>Are you aware of MAFP’s Journal CME via “The Maryland Family Doctor” publication?</td>
<td>89%</td>
</tr>
<tr>
<td>Have you completed/submitted a CME quiz/quizzes after reading CME articles?</td>
<td>73%</td>
</tr>
<tr>
<td>Would you be likely to sign onto online MAFP CME in the form of 1) live-streamed and/or 2) post-conference video-casts?</td>
<td>52%</td>
</tr>
<tr>
<td>If you usually attend MAFP conferences in person, would online MAFP CME cause you to be a) less likely to attend in person (12%), b) still likely to attend in person (44%), c) I don’t usually attend in person, but would likely sign onto online CME (33%)…</td>
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</table>

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kevin.ferentz@bmsi.org

Alana Cornejo, Recruiter
Phone: (410) 558-4888
Fax: (410) 510-1393
alana.cornejo@bmsi.org
MAFP’s new online CME video program will be in addition to, not replacing, our other popular educational offerings.

whereby selected live clinical topic presentations from already produced MAFP conferences will be offered in the format of online video-casts. Real-time, live streamed webcasting remains a possibility for the future.

So we begin…. with August 1 as the anticipated kick-off date, MAFP will offer CME-approved online video-casts from the June, 2013 Assembly Program. Videos from the February, 2014 and subsequent conferences will be added to the online library and will be available for a period of 1-year from date of posting to MAFP’s website www.mdfafp.org. Learners may register to view as many MAFP CME videos as they like in the comfort of their homes or offices and according to their schedules. They will be able to log off and back in at their convenience. Registrants will receive confirmation and certificates of completion. They will be asked to complete a quick online evaluation.

MAFP’s new online CME video program will be in addition to, not replacing, our other popular educational offerings. We will look forward to your feedback and, if you like the videos, helping us to spread the word. It is our hope that you will take advantage of any and all formats for MAFP CME as we strive to help members and others fulfill their educational needs and requirements.

### AAFP Scientific Assembly Schedule

#### National Conferences of Family Medicine Residents and Medical Students:

<table>
<thead>
<tr>
<th>Year</th>
<th>Month/Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>Aug. 1-3</td>
<td>Kansas City</td>
</tr>
<tr>
<td>2014</td>
<td>Aug. 7-9</td>
<td>Kansas City</td>
</tr>
<tr>
<td>2015</td>
<td>July 30-Aug. 2</td>
<td>Kansas City</td>
</tr>
<tr>
<td>2016</td>
<td>Aug. 3-6</td>
<td>Kansas City</td>
</tr>
</tbody>
</table>

#### Congress of Delegates (CoD) and Scientific Assembly (SA):

<table>
<thead>
<tr>
<th>Year</th>
<th>Month/Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>Sept. 23-25 (CoD); Sept. 24-28 (SA)</td>
<td>San Diego</td>
</tr>
<tr>
<td>2014</td>
<td>Oct. 20-22 (CoD); Oct. 21-25 (SA)</td>
<td>Washington, DC</td>
</tr>
<tr>
<td>2015</td>
<td>Sept. 28-30 (CoD); Sept. 29-Oct. 3 (SA)</td>
<td>Denver</td>
</tr>
<tr>
<td>2016</td>
<td>Sept. 19-21 (CoD); Sept. 20-24 (SA)</td>
<td>Orlando</td>
</tr>
</tbody>
</table>

#### Annual Leadership Forum (ALF) and National Conference of Special Constituencies (NCSC):

<table>
<thead>
<tr>
<th>Year</th>
<th>Month/Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>2014</td>
<td>May 1-3</td>
<td>Kansas City</td>
</tr>
<tr>
<td>2015</td>
<td>April 30-May 2</td>
<td>Kansas City</td>
</tr>
<tr>
<td>2016</td>
<td>May 5-7</td>
<td>Kansas City</td>
</tr>
</tbody>
</table>

### CME Author Disclosure Statements

The authors of CME articles in this publication, except for any listed below, disclose that neither they nor any member of their immediate families have a significant financial interest in or affiliation with any commercial supporter of this educational activity and/or with the manufacturers of commercial products and/or providers of any commercial services discussed in this educational material. MAFP receives no commercial support to offset costs in the production of The Maryland Family Doctor Publication.

### Next Edition

- Focus on Cardiovascular Health
Injection Therapies for Musculoskeletal Injuries

Brian N. Corwell, M.D.

Physicians are encountering a dramatically increasing number of patients with musculoskeletal injuries and conditions. The explanation for this phenomenon is multifactorial, but likely includes the aging baby boomer population, the obesity epidemic, and an increasingly active portion of the population pursuing the health benefits of exercise. Although conservative approaches to musculoskeletal injuries such as rest, ice, compression, elevation, analgesic medications, and physical therapy are usually the first line of treatment, they do not provide relief for some patients. When these treatments are ineffective, injectable agents are a welcome addition to the nonsurgical armamentarium available to physicians with the goal of promoting healing, reducing pain, and improving mobility and function. With appropriate patient selection, injections may provide substantial short-term relief with infrequent complications. This article provides a brief overview on three classes of injectable agents: corticosteroids, Hyaluronic acid (HA) derivatives, and platelet rich plasma (PRP).

General indications for therapeutic injections include inflammatory arthritides (e.g. rheumatoid arthritis, gout), noninflammatory arthritides (e.g. osteoarthritis), and select soft tissues conditions (e.g. epicondylitis, tenosynovitis). General contraindications include broken or infected skin at the injection site, unstable coagulopathy, underlying fracture, and known hypersensitivity to the injectable agent. Complications can include skin or fat atrophy, skin pigmentation changes, post injection pain flare, facial flushing, iatrogenic infection, and tendon rupture.

Corticosteroids
Corticosteroid medications provide potent local anti-inflammatory effects. Corticosteroids have been demonstrated in numerous randomized clinical trials and meta-analyses to reduce pain associated with OA of the knee. In general, corticosteroid injections are believed to be most effective in patients with evidence of inflammation and/or effusion. These benefits are transient, lasting weeks to months and provide only partial relief from pain. Most of the benefit dissipates within six weeks after the injection. Further, as the patient’s condition progresses, the duration and maximum effect from subsequent injections diminishes. Standard corticosteroid injection with an added local anesthetic can provide instant feedback with relief of pain so that the practitioner confirms that the injection was administered in the proper location. Aspiration of inflammatory fluid prior to injection increases the durability of glucocorticoid injection response. Because of the risk of contamination, single-use medication vials are preferred over multiuse vials. Finally, although not based on controlled studies, corticosteroid injections generally should not be repeated at the same site unless there has been at least a partial clinical response previously. Additionally, because of concerns over possible deleterious effects, a steroid injection should not be repeated at the same site more than once every 3-4 months.

Despite the transient effects of such therapy, The American Academy of Orthopaedic Surgeons (AAOS) recommends the use of intra-articular corticosteroid injections for short-term pain relief in patients with symptomatic OA of the knee. No one type of corticosteroid product has been shown to be superior to others and utilization differences are largely geographic.

Hyaluronic Acid Derivatives
An alternative to corticosteroid injections for the treatment of OA is intra-articular injection of hyaluronic acid. Hyaluronic acid (HA) is a large, high molecular-weight, high-viscosity chemical synthesized by chondrocytes in the joint cartilage. HA plays a critical role in joint lubrication and is deficient in degenerative joint diseases. As OA progresses, the amount and viscosity of synovial fluid decreases. Synthetic HA was developed to ease pain and improve function in patients with OA by lubricating the joint and improving shock absorption. The actual mechanism of action is debated but likely includes a short-term lubricating effect as well as an anti-inflammatory effect. Providers commonly use HA injection therapy in patients with mild to moderate OA of the knee. Better results have been seen in younger patients with less advanced disease. Although HA was heralded as a potential alternative to corticosteroids, its efficacy and short- and long-term effects remain controversial, as does its role in the treatment of symptomatic OA of the knee. The available evidence suggests that HA may have a small pain relieving advantage when compared with intra-articular placebo injections or even oral nonsteroidal anti-inflammatory medications (NSAIDs). Larger clinical trials are needed to determine whether there is an identifiable subset of patients with OA for whom HA is particularly beneficial. Therefore, based on the available evidence and in contrast to corticosteroid...
Injection therapy is best viewed as a means to facilitate use of other modalities and as part of a comprehensive treatment plan rather than a quick fix.

Injections, the AAOS was unable to recommend for or against the use of intra-articular HA injections for patients with mild to moderate OA of the knee. Additionally, all of the hyaluronic agents are expensive, which is a significant motive for initial selection of corticosteroid products to treat patients with osteoarthritis. Only a few studies have compared various HA products and there is currently no compelling evidence guiding the use of one over another.

Platelet Rich Plasma

The technique for concentrating the growth factors of autologous platelets was developed over 20 years ago and was initially used in maxillofacial and plastic surgery. Recently, PRP has emerged as a newer approach to treating not only OA but also degenerative soft-tissue overuse conditions that traditionally respond poorly to both conservative treatments and corticosteroid injections. The proposed mechanism of action of PRP is based on the potential healing affect of growth factors, cytokines, and other bioactive substances that are present in high concentration in platelets. The goal is to induce a healing response in chronic non-healing conditions such as lateral epicondylitis, and rotator cuff tears. Histologically, these types of conditions demonstrate tissue degeneration rather than inflammation. The lack of an inflammatory component explains the limited success with corticosteroid injections and oral NSAIDs.

PRP involves taking blood from the patient and spinning it in a centrifuge in order to separate blood cells and concentrate growth factors up to 2 to 10 times normal values. This concentrate is then injected in the injured tissue site. Unlike corticosteroids, PRP should be injected alone, as the addition of local anesthetic or corticosteroid has been shown to reduce tenocyte viability. Despite the lack of clinical evidence showing decreased efficacy of PRP with concomitant ingestion of platelet inactivating medicines such as aspirin or NSAIDs, some authors suggest abstaining from these medicines for one week before injection and for several days after injection.

A number of studies investigating the use of PRP have received attention in the popular press as several high-profile athletes have claimed PRP injections expedited injury healing. Currently, PRP is used for tendon and ligament injuries. Other applications such as fracture care and osteoarthritis are being studied. Evidence for the effectiveness of PRP therapy from small case studies is not conclusive. The proper use and application of PRP in the sports medicine population is still unknown owing to a lack of high-quality, prospective research. That being said, data from small human studies suggest the exciting potential for PRP to be used in the treatment of many musculoskeletal injuries including tendon, ligament, and cartilage disorders. Early research suggests that PRP injections appear superior to HA in treating symptoms of mild OA of the knee and appear superior to glucocorticoids in treating lateral epicondylitis. PRP injections have few reported complications as their autologous nature makes adverse reactions unlikely. In addition, PRP has less potential for serious side effects such as tendon rupture and fat necrosis compared to corticosteroids.

Conclusions:

When treating a patient with a musculoskeletal injury or condition, it is best to start with traditional non-interventional approaches. If conservative treatments fail, injectable agents may help. In some cases, a single injection may be all that is required to ameliorate a painful condition. Injection therapy is best viewed as a means to facilitate use of other modalities and as part of a comprehensive treatment plan rather than a quick fix.

Corticosteroid injections are effective in the treatment of conditions in which inflammation is present, such as reducing pain associated with osteoarthritis. Intra-articular injections with HA are another therapeutic option, though current data suggests that HA is less efficacious than corticosteroids. PRP injections may be more effective than corticosteroids for treatment of tendinopathies and other select musculoskeletal conditions. High-quality prospective evidence is needed to quantify the dosage, clinical indications and relative benefit of these injection therapies. Substantial short-term pain relief is possible with appropriate selection of musculoskeletal condition and injectable agent.

Dr. Corwell is Attending Physician, Mercy Medical Center Emergency Department in Baltimore. He is Team Physician, University of Maryland, College Park. He completed his Fellowship in Sports Medicine at the University of Maryland Medical Center/Union Memorial Hospital, both in Baltimore, in 2006.

Note: References for this article are posted at www.mdafp.org; Publications tab. CME questions for this article are posted at www.mdafp.org; CME Quiz tab, Summer, 2013.
Sickle Cell Trait in Athletes

Lindsay Jones, M.D.

Leonie M. Prao, M.D.

Although most sudden death in sports is related to cardiac issues we have recently recognized Sickle Cell Trait (SCT) as a potential risk factor. SCT had historically been considered a benign condition. Approximately 2.5 million Americans and 8-10% of African Americans carry the trait. SCT has also been found in those of Mediterranean, Central/South American, Caribbean, and Indian descent.

Sickle cell anemia is a commonly known inherited disease for which we routinely screen all newborns across the US. Having SCT alone means a person carries only one of the two hemoglobin genes necessary to cause the disease. Carrying the trait is not associated with the classic signs or symptoms of sickle cell disease, such as intermittent crises of severe pain in the extremities or chest, fatigue and shortness of breath.

Sickle cell anemia causes red blood cells to change from a disc-like shape to an abnormal crescent shape (sickle shaped). The abnormal cells may become lodged in vessels impairing oxygen delivery. Although the definitive underlying mechanisms of the adverse outcomes due to SCT is not known, it has been shown that those with SCT have higher blood viscosity, reduced RBC deformability, increased RBC fragility, increased inflammatory marker levels, and may sickle in extreme exertion or altitude. Exertional sickling increases risk for developing rhabdomyolysis, which is 200 times more likely in those with SCT compared to those without.

Signs of exertional SCT-related illness include significant fatigue, muscle pain and weakness. It only takes 2-3 minutes of sprinting or other sustained effort activities for problems to manifest. This is different from heat illness, which usually occurs later in exercise and causes painful muscle cramping. Some individuals with SCT have a decreased ability to concentrate urine to conserve water, putting them at higher risk for dehydration, thus increased risk for rhabdomyolysis.

Altitude greater than 5000 feet can also predispose those with SCT to an adverse outcome. Strenuous physical activity without altitude acclimatization can result in splenic infarct. Athletes often present with sudden, acute pain in the lower ribs, left upper quadrant pain, lower chest pain, weakness, and nausea. Symptoms may mimic pleurisy, a pneumothorax, “a side stitch,” or renal colic.

The most feared adverse outcome of SCT is exercise-associated collapse and/or death. The link between SCT and sudden death was first noted in 1970 amongst military recruits. Subsequent autopsies revealed a disproportionate number of recruits with a fatal collapse were SCT positive. In college athletes, deaths associated with SCT have occurred almost exclusively in football. Football student-athletes (SA’s) with SCT have collapsed and died more often than players with any other condition.

Risk factors for adverse event occurrence in those with SCT include poor exercise fitness, inadequate hydration and sleep, incomplete heat acclimatization, environmental heat stress, use of heat-retaining clothing, and delays in the recognition and treatment of exertional heat illness.

In collegiate athletics, all student athletes at Division I and Division II schools are required to have SCT testing completed, to sign a waiver declining testing, or to provide documentation of prior testing. Division III schools voted in January, 2013 and now require confirmation of SCT status for all student-athletes no later the 2014-15 academic year.

Athletes with SCT are not prohibited from sports participation. However, specific exercise guidelines have been established. Coaching staff should be aware of the SCT status of their athletes so that steps can be taken to minimize the chances of adverse outcomes. SA’s should know their status so that they are aware of the implications for their general health, athletic participation, and future family planning.
Athletes with SCT are not prohibited from sports participation. However, specific exercise guidelines have been established. Coaching staff should be aware of the SCT status of their athletes so that steps can be taken to minimize the chances of adverse outcomes.

Proper hydration is paramount, especially in hot and humid conditions. This includes avoidance of high caffeine energy drinks or other supplements that may cause dehydration. Exercise during acute illness or fever should be avoided.

Care should be taken to ensure complete acclimatization to altitude, heat, and humidity. This can be achieved through a slow build-up of intensity at the start of the season, preceded by a gradual pre-season conditioning program. SA’s should set their own pace and be sure to achieve adequate rest and recovery.

Coaches should not push SCT SA’s beyond the point of fatigue, through abnormal muscle weakness, ischemic pain, or breathlessness as this may lead to adverse outcomes. Activity should be ceased immediately if symptoms occur and a planned emergency response should be initiated.

SCT is an important concern in the athletic population and only becomes a threat in certain situations. Simple precautions and screening will prevent deaths and help athletes with SCT enjoy successful and healthy athletic careers.

Drs. Jones and Prao are Primary Care Sports Medicine Fellows at the University of Maryland Department of Family and Community Medicine/Medstar Health System Primary Care Sports Medicine Fellowship in Baltimore.

Note: References for this article are posted at www.mdafp.org; Publications tab. CME questions for this article are posted at www.mdafp.org; CME Quiz tab, Summer, 2013.

Sideline Medicine for the Team Physician
Stabilization of the Cervical Spine Injured Athlete

Andrew M. Tucker, M.D.

For the physician who provides medical coverage on the sidelines, a number of emergent scenarios can present which require a variety of diagnostic skills and well conceived plans to maximize outcomes in the player/patient. From serious head and eye injury, to blunt trauma to the chest and abdomen, to life threatening environmental injury, the team physician has to be as prepared as the teams that he/she covers.

One situation that presents itself in collision sports is the potentially catastrophic cervical spine injury. Football, ice hockey, wrestling, gymnastics and cheerleading are sports and activities that most commonly give rise to serious cervical spine injuries. The physician is responsible for the planning and execution of a treatment protocol to address the need for patient stabilization, evaluation, and rapid transport to an appropriate facility capable of treating such rare, potentially devastating injuries.

The goal of the treatment team is to stabilize the cervical spine to prevent possible secondary neurologic injury, assess and maintain the breathing and circulation status of the injured athlete, and to carry out expeditious transport. Pre-event planning by the treatment team (physician, athletic trainers, EMTs, paramedics) and regular practice of these scenarios is important.

Clinical presentations that commonly require C-spine stabilization include neck injury with severe axial spine pain, bilateral sensory and/or motor symptoms in the upper and/or lower extremities, and persistent unconsciousness after closed head injury in which associated cervical spine injury must be assumed.

When arriving at the injured athlete, one individual (often the physician) should stabilize the head/neck in the position continued on page 16
Sideline Medicine (continued)

the athlete is lying, while assessment of breathing and circulation is carried out by another caregiver. If respiratory and circula-
tion systems are intact, a limited neuro-
logic screen is appropriate to document initial sensory and motor deficits.

A coordinated log roll technique may be necessary to place the athlete in supine position with the head and neck main-
tained in a neutral alignment. When pres-
ent, shoulder pads and helmet should be left in place, and are typically not removed until the athlete is in the emergency department. If the athlete is wearing a helmet with a facemask, the facemask should be removed immediately to pro-
vide access to the airway. If the facemask cannot be removed, or the airway cannot be managed effectively with the helmet in place, the helmet should be removed with maintenance of neutral cervical spine alignment. Videos from the National Ath-
letic Training Association and American College of Sports Medicine are available that demonstrate these maneuvers.

The next challenge involves transferring the athlete to a spine board while head and neck stability is maintained. Both log roll and player lift techniques are effective ways of securing the spine board under the injured athlete. Again, edu-
cational videos are available to assist the reader in proper technique.

Once the athlete is on the board, the head and neck can be secured with foam pads or sand bags while the body is secured with straps or tape. Once secured, the athlete can be transported off the field on a cart, or loaded directly in the ambulance for transport to the nearest trauma facility.

The attending physician may elect to accompany the injured athlete to the hospi-
tal, if other capable medical personnel are still available to cover the athletic contest. The physician or athletic trainer should call ahead to the hospital to alert the trauma team that will be taking over on arrival.

The physician and other caregivers must ensure that necessary equipment is available and in working order to carry out the objectives of successful cervical spine stabil-
ilization and transport. As mentioned above, regular practice of these perishable skills is important – the relatively infrequent nature of these occurrences tends to dull the necessary vigilance and attention to detail required of these situations. Com-
pounding these issues is the public nature of these injuries that often occur in games and competitions viewed by spectators that may number in the thousands. Need-
less to say, a physician does not want a real life scenario be the first time the medical

Dr. Tucker is Medical Director, Union Memorial Sports Medicine, Union Memori-

Note: CME questions for this article are posted at www.mdafp.org; CME Quiz tab, Summer, 2013.
Musculoskeletal Ultrasound

Valerie E. Cothran, M.D.

The use of ultrasound in medicine began 70 years ago when in 1942 Karl Dussik, a psychiatrist and neurologist at the University of Vienna, attempted to locate brain tumors by measuring the transmission of ultrasound beams through the head, becoming the first physician to apply ultrasound as a diagnostic method in human subjects. The earliest diagnostic application of ultrasound in musculoskeletal disease was published in 1972 in the British Journal of Radiology. The authors used ultrasound to differentiate Baker’s cysts from thrombophlebitis. The demonstration of the ultrasound features of congenital dislocation of the hip by R. Graf led to the first widespread practical application of ultrasound in musculoskeletal disease.

Today musculoskeletal ultrasound (MSK US) is being used increasingly for both diagnostic and therapeutic purposes. Though widespread in Europe, its use in the United States as a primary imaging modality is just beginning to emerge. Many physicians are unaware of the possible applications of MSK US. Ultrasound has the potential to become the preferred method for imaging evaluation of musculoskeletal disorders given its utility and cost-effectiveness.

Ultrasound Technology

MSK US uses frequencies of 3 – 20 million cycles per second (MHZ). Ultrasound images are generated by echoes that reflect off tissue boundaries. The ultrasound transducer sends out pulses of sound waves. It also serves as a detector of echoes as the pulses are reflected back from the tissues. Each reflected wave represents a dot on the screen. The ability to identify various tissue structures is based upon the principle of echogenicity. Echogenicity is defined as the ability of a substance to reflect sound waves and produce echoes (reflect the signal). Dense material is more reflective, hyperechoic, and appears white. Less reflective material, hypoechoic, will appear as varying shades of gray. Structures which have no reflective material, anechoic will appear black. In regard to MSK US a practical order of echogenicity is as follows: bone > ligament > tendon > nerve > muscle > fluid. The difference in echogenicity allows for easy identification of fluid collections, calcific tendons, muscle tears, ligament and tendon ruptures.

Ultrasound Advantages

Ultrasound is a quick noninvasive, radiation free way of imaging patients. There are no limitations to the patients that are eligible for ultrasound. It can be used even in those that are unable to have an MRI due to an implanted pacemaker, ICD, metal hardware, clips or stents. It is also an alternative for claustrophobic patients or those that are too big for MRI or CT scanners. Ultrasound is particularly good for soft tissue and peripherally located structures of most joints. It has been shown to be just as sensitive and specific as MRI in detecting rotator cuff tears. The images are not affected by metal artifact or motion. U/S is well tolerated by most patients as they can sit comfortably without the need to stay still. Ultrasound has an advantage over MRI and CT in that it can provide dynamic imaging of musculoskeletal structures. Patients can be asked to move in and out of the position that continued on page 18
Musculoskeletal Ultrasound (continued)
produces their symptoms aiding in the diagnosis of specific pathologies that may be missed with static imaging. Dynamic imaging helps the physician to identify unstable tendons, snapping calcifications within tendons or subluxing tendons/nerves. In addition, ultrasound has been shown to be more sensitive than radiographs in the diagnosis of early rheumatoid arthritis. Thus, allowing for earlier initiation of therapy and safe, easy, and inexpensive monitoring of disease progression.

Ultrasound Disadvantages
MSK U/S is not perfect, it has its limitations. All ultrasound is operator dependent. The MSK system is widely considered to be one of the more difficult body systems to master in ultrasonography. It requires detailed knowledge of the relevant anatomy and hours of hands on experience. Even in the hands of the most skilled clinician it has several other limitations. MSK U/S in not useful in evaluating bone tumors as the sound waves cannot penetrate bone. Deeper structures are not well visualized and for that reason MSK U/S is not useful in the diagnosis of derangement to internal knee structures. There are also limitations in visualizing the glenohumeral and acetabulofemoral joint, which limits the ability to diagnosis hip and shoulder labral tears.

Therapeutic Applications
MSK U/S allows for easy and accurate needle placement for injections and aspirations. This can be done as a “safe injection” by identifying the site for injection for marking the point of insertion and planned path of the needle. The clinician may then sterilize the site and perform the procedure without direct visualization. This technique is less time consuming as it does not require sterile preparation of the probe. The most accurate method for injection/aspiration is direct visualization. In order to maintain sterility the probe should be placed in a sterile probe cover. Sterile ultrasound gel must be used as well. Direct visualization allows for precise needle placement.

Conclusion
MSK ultrasound is a quick, safe, inexpensive and well tolerated imaging tool that has been underutilized in the United States. It is portable and easy to use at the bedside. As U/S is operator dependent it does require proper training and experience. If not available in the clinical setting it is a modality that should not be forgotten when ordering imaging studies and/or guided procedures through radiology.

Dr. Cothran is Director, Primary Care Sports Medicine Fellowship, University of Maryland, Baltimore.

Note: References for this article are posted at www.mdafp.org; Publications tab. CME questions for this article are posted at www.mdafp.org; CME Quiz tab, Summer, 2013.

Key Elements of the Pre-Participation Physical Exam

James E. Baronas, M.D.

There are approximately 7 million athletes at the high school level and over 30 million athletes younger than 18 are on some sort of organized sports team. With an estimated incidence of sudden cardiac death (SCD) of 1:100,000 to 1:200,000 in high school age athletes it is important that a provider be able to correctly perform a Pre-Participation Physical Exam (PPE). Sudden deaths in young athletes are tragic events which assume a high public profile and are often misunderstood. That being said the goal of the PPE is to encourage safe participation and not to disqualify. Only 0.3 to 1.3% of athletes are not cleared to participate and only 3.2 to 13.9% require further evaluation prior to clearance. As more and more athletes both young and old present to their health care provider for “clearance,” it is important that these same providers are competent and familiar with the PPE.

Routine Screening
There are currently no routine screening tests recommended for asymptomatic athletes with a normal physical exam. However, the NCAA now requires sickle cell testing in all Divisions.

Medical History
The medical history portion of the PPE is by far the most important part. The history alone identifies 65 to 77% of medical
conditions and more specifically 88% of medical conditions and 67% of musculoskeletal problems. Before athletes come in for the visit they should fill out a PPE history form with their parent or guardian if below 18. Studies of high school students have shown that only 19-39% of responses by younger athletes were consistent with their parents.

During the medical history the provider should screen for potential risk factors for SCD. The American Heart Association (AHA) recommends ascertaining the athletes personal history of any (1) exertional chest pain/discomfort, (2) unexplained syncope/near syncope, (3) excessive exertional dyspnea/fatigue, (4) history of heart murmurs, and (5) history of elevated blood pressure. The AHA also recommends ascertaining a family history of (1) premature/SCD in a relative under age 50, (2) disability of a relative from cardiac issues under age 50, or (3) a specifically known cardiac condition in family members.

Providers should also screen athletes in detail about their history of concussions/head injuries. It is estimated that 53% of athletes suffer concussions before high school and 36% will have multiple concussions before college. A detailed history including the number of concussions, severity, and time of return to play are all useful in helping to make a decision regarding clearance to participate.

Finally, the medical history should include history of current or previous musculoskeletal injuries including surgeries. It is also important, especially in younger athletes, to consider including screening for high risk behaviors or conditions including drug/alcohol abuse and obesity. As this may be their only visit to a health care provider all year it is an opportunity to engage a young person about these issues. It is also important to screen female athletes for the female athletic triad which includes amenorrhea, eating disorders and osteoporosis.

Physical Exam

An athlete’s physical exam should include (1) vitals including pulse and blood pressure, (2) height and weight, (3) visual acuity, and (4) a general physical exam of systems including HEENT, Neck, Respiratory, Abdominal, Skin, and in some cases a genital exam. A general neurologic exam should be performed with attention given to those with significant history of concussion or a recent concussion. A musculoskeletal exam can be performed in different ways including general, joint specific or sport specific.

During the PPE the AHA recommends specific guidelines when assessing cardiovascular health which include (1) auscultation for heart murmur performed in the supine and standing position with provocative maneuvers like valsalva if necessary, (2) palpation for femoral pulses to exclude aortic coarctation, (3) examination for physical stigmata of Marfan syndrome, and (4) a brachial artery blood pressure in the sitting position.

Conclusion

The overall goal of the PPE is to maintain the health and safety of all athletes no matter what age or level they compete at. However, there is no conclusive evidence that screening PPEs will reliably identify clinically silent conditions. That should not stop health care providers from being familiar with the PPE and its guidelines. Clearance should not be given to any athlete who’s screening PPE is not normal. A PPE performed correctly may very well make a difference in the lives and overall health of our athletes and their ability to compete safely.

Dr. Baronas is Assistant Professor of Family and Community Medicine Medical Director, University Maryland Immediate Care, Baltimore

Note: References for this article are posted at www.mdafp.org; Publications tab. CME questions for this article are posted at www.mdafp.org; CME Quiz tab, Summer, 2013.
It is estimated 45 million children between the ages of 6 and 18 years of age participate in organized sporting activity.\(^1\) This estimate does not include the children aged 4 and 5 years, who also are beginning to partake in competitive athletics. Classes, tournaments, showcases, sport specialization, and performance enhancement sessions now target younger ages. Athletes begin younger, specialize sooner, play on multiple teams in a single season, and participate year round without rest.\(^3\) These demands place the skeletally immature body at risk for injury.\(^5\)

An estimated half of the visits to the primary care physician are due to overuse injuries and should demonstrate knowledge of presentations and risk factors.\(^6\) Intrinsic risk factors include lower extremity misalignment, leg length discrepancy, hyperpronation of the foot, pes planus, pes cavus, muscular inflexibility and imbalance.\(^7\) Extrinsic factors include hard training surfaces, old shoe wear, improperly fitting equipment, and rapid increases in training.\(^7\) The skeletally immature athlete has unique sites at risk for injury. The tendon attachment site (apophysis), joint surface (articular cartilage), and growth plate (physsis) all serve as potential for injury if overstressed. This article reviews these unique sites in the skeletally immature athlete.

**Apophyseal Injuries**

The apophysis is the insertion of tendon to the cartilage in growing bone and serves as a secondary ossification center which does not fuse until skeletal maturity.\(^7\) Until fusion, the attachment site is weaker than the tendon/muscle unit. Therefore, the tendon/muscle unit attaching to the apophysis can lead to irritation or inflammation (apophysitis). During childhood, bones grow at a faster rate than muscles leading to muscular tightness and inflexibility. Growth inadvertently places strain on the apophyseal attachment site. The common sites of apophysitis are calcaneus, base of the 5th metatarsal, tibial tuberosity, inferior pole of the patella, pelvis, and medial epicondyle of the humerus (Table 1). Signs include insidious onset of pain during and after repetitive activity at the attachment site of the tendon/muscle unit. Examination in the office may show localized swelling at apophyseal site, point tenderness, and resisted muscle group testing reproduces pain. Standard radiographs of the affected area are normal with open ossification centers present at the affected site. Treatment is relative rest, ice massage, activity modification with low impact activities until pain free, then stretching and strengthening program targeting the affected muscle group. Additionally, gel heel cups and patellar strap can be used acutely to help with inflammation at the calcaneal apophysis and tibial tuberosity apophysitis respectively.

**Articular Cartilage**

The immature articular cartilage on the joint surface is susceptible to shear injury from repetitive use in youth athletes.\(^8\) Juvenile osteochondritis dissecans (OCD) is microtrauma of incompletely vascularized subchondral bone leading to fissures of the cartilage and fragmentation. OCD is more often diagnosed in male athletes between the ages of 9 and 18 years of age. The joints affected commonly are the knee (medial and lateral femoral condyles), ankle (talus), and elbow (capitellum).\(^7\) Presentation in the office typically consists of no trauma, insidious onset of joint pain, swelling and limited motion of the joint. A description of joint locking or catching occurs if the fragment

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**Table 1. Common Sites of Apophysitis in the Skeletally Immature Athlete**

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sever’s Disease</td>
<td>Calcaneus and Gastrocnemius and Soleus</td>
</tr>
<tr>
<td>Iselin’s Disease</td>
<td>5th Metatarsal and Peroneal Brevis</td>
</tr>
<tr>
<td>Osgood-Schlatter Disease</td>
<td>Tibial tuberosity and Quadriceps Extensor Muscle</td>
</tr>
<tr>
<td>Sinding-Larsen-Johansson Disease</td>
<td>Inferior Pole of the Patella and Quadriceps Extensor Muscle</td>
</tr>
<tr>
<td>Apophyseal Disorders of the Pelvis</td>
<td>Anterior Superior Iliac Spine and Sartorius</td>
</tr>
<tr>
<td></td>
<td>Anterior Inferior Iliac Spine and Rectus Femoris</td>
</tr>
<tr>
<td></td>
<td>Iliac Tuberosity and Hamstring</td>
</tr>
<tr>
<td>Little League Elbow</td>
<td>Medial Epicondyle and Flexors of the Forearm</td>
</tr>
</tbody>
</table>
An estimated half of the visits to the primary care physician are due to overuse injuries and should demonstrate knowledge of presentations and risk factors.

Figure 1. Juvenile Osteochondral Defect of the Capitellum

Displaced. Physical examination reveals joint effusion and limited range of motion compared to the unaffected side. Radiographs may show a lesion in the suspected location (Figure 1). An MRI without contrast of the joint is necessary for staging the lesion and assessing healing potential. Initial management in the primary care office includes rest from offending sport, symptomatic pain management, and immobilization with crutch support for knee and ankle lesions. Referral to orthopedic surgery is warranted for further management.

Physis

The physis is the growth plate at the end of long bones comprised of mainly cartilage cells subject to repetitive stress. The proximal humerus and distal radius are two common sites subject to repetitive force in skeletally immature athlete. Little League Shoulder (proximal humeral epiphysiodesis) occurs in any sport with repetitive rotational overhead activity such as pitching in baseball, swimming, tennis, volleyball, and gymnastics. Symptoms are insidious onset of lateral shoulder pain exacerbated by throwing or overhead activity. Commonly the athlete describes loss of velocity and accuracy with throwing. Examination reveals tenderness at the proximal humeral physis, decreased shoulder range of motion, and pain with resisted external rotation. Standard AP shoulder view in internal and external rotation reveals widening at the proximal humeral physis compared to contralateral side (Figure 2). Termination of overhead activity is recommended for six weeks, then physical therapy and throwing evaluation is mandatory. Competitive overhead activity recommences in three months. Prevention is paramount and youth pitchers should be aware of published pitch counts and pitch type guidelines for age.

Summary

Education of children and families during the pre-participation physical is critical to prevention. The American Academy of Pediatrics (AAP) recommends organized sport activity begin at age six and sport specialization begin at age thirteen. Engaging children in a single organized sport per season is a healthy balance for skeletally immature athlete. A three month minimum of rest from a single sport is strongly advised. The goal is to keep young athletes active and safe from injury!

Dr. Valasek is Assistant Professor, Department of Orthopedics, Pediatric Division, Johns Hopkins University School of Medicine. She practices at Johns Hopkins Healthcare and Surgery Center in White Marsh, MD.

Note: References for this article are posted at www.mdafp.org; Publications tab. CME questions for this article are posted at www.mdafp.org; CME Quiz tab, Summer, 2013.
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Humility: What is the true definition of this word? Sometimes, you have to live it to know.

Case in point… Junior year in high school. I thought I was pretty good at running so I tried track and field. I was a fair runner, would usually come in second or third in the quarter mile or mile run. Never won a race, but usually did not come in last. Enter the county meet, where times are important, and where the real runners shine. The track is banked on one side with a huge hill, where all the teams from the county can sit and watch the action. My race for the quarter mile is called, we all line up, and there is a very young track coach with the starter gun getting us ready. When he looked over the field, he said we had too many runners and I would have to run the race by myself, before the rest of the field could run.

I couldn’t believe this was happening to me! I would definitely come in last place, and I would never even get in the way of the front runners because of my short legs and limited ability. However, this novice track coach with his fancy clipboard and whistle stated I would have to run by myself. I should have said “thanks but no thanks” but, with my Boy Scout upbringing, I was taught to never quit.

Yes, he started me off with an official starter gun, (all by myself), and as I was running around the track with the entire embankment of high school students and parents watching me, I was taunted by several comments along the way. “Hurry up, they are catching you,” “Hey, you are doing great, you are winning the race,” all the while, I knew my time was slow and it seemed like it would never end.

At the end of the race, they did officially time me with their stopwatch, (of course my time was terrible, and of course I did come in last after the second race was run). I then moped off the field and tried to disappear as quickly as possible. I was so humiliated, I wanted to cry, but high school juniors do not cry.

Fast forward: senior year, got smart, played tennis instead of running track (actually won a few matches with a $15 Rod Laver racquet), high school graduation, successful college career, acceptance into medical school (that experience will be another story), residency, Co-Chief Resident, private practice with my good friend from medical school (Robert Duncan, M.D.), rough and tough times starting a practice, but we kept at it, and were able to build a very successful practice, which now includes six physicians and two nurse practitioners.

Monday morning, grab a chart for a new patient, and when I enter the door, my jaw feels like it had dropped to the floor. I quickly compose myself and say “Hi” to my new patient who fired the starting gun for that dreadful experience on that hot spring day in 1972.

It is amazing how the human body works and how emotions can be stored, shelved, put away, forgotten, but at any given moment, just like with our new EMR, you can instantly drag all of the your old feelings from those deep dark crevices of your brain. Sitting in front of me was the now middle aged patient who caused me to have one of the most humiliating experiences of my life. Now, I was supposed to smile, welcome him to the practice and act as if everything was normal.

As a physician, you deal with so many emotional experiences and after a while, you feel like you have seen it all. Here, I was trying to come to grips with my own raw personal emotions from that woeful day so many years ago. Should I say something? This thought entered my mind with my first several encounters with this patient, but I always knew the answer was no. Did I hate this patient? No, but actually after the first and subsequent visits with him and his wife, I really enjoyed talking to him and learning about his life experiences.

continued on page 24
I learned he received a scholarship at the University of Maryland College Park for track and field, and he definitely excelled at this sport. Obviously, this led to his credibility as a track coach in his later years. Over the years, I would closely follow his times in the local paper, as he won most of the races for his age group for the 5 or 10 kilometer races. As time went on, his running times were starting to slow down, but I always found his name in the top three for his age category. As his physician, I had to deal with his body breaking down due to “Arthur,” as he would say, which is our definition for degenerative osteoarthritis. Father time recently reared his ugly head when I had to clear my patient for surgery, (yes, you guessed it, for a knee replacement), but sure enough, he was quick to heal and right back on the road running to the best of his ability. All these years, all those miles of running, always a smile on his face and never a complaint.

Just last month, I was on the sideline cheering on runners for our local 5 kilometer race. I felt a tear in my eye when I saw him walk by me during the race. The smile on his face told everyone that running was his lifelong passion, even though he was now reduced to walking in a runners world. I was so proud of my patient for his determination, knowing that he will never again win another race, but he will always continue to participate any possible way in order to follow his love of running.

After my first encounter with this “horrible, non-caring,” young coach, (probably just 22 years old at the time), all of these years later, this patient showed me the true meaning of passion for a given sport or hobby. He lived it, he breathed it, and yes at one time, he made a mistake with a young inexperienced runner because at the time, he was just “going by the book.”

As family physicians, we are able to experience with our patients many life changing moments, making us all better people. Life experiences define us. Let us hope that there is a family physician in our lives to share our triumphs and to guide us through difficult times.

Addendum: The patient has since moved to Arizona and when I talked to him last week, he had just finished a three mile hike in the mountains and he sounded great.

David W. McClure, M.D.
Bel Air, MD
The following MAFP members and staff well-represented the Maryland Chapter at the combined AAFP Annual Leadership Forum (ALF) and National Conference of Special Constituencies (NCSC) held April 25-27, 2013 in Kansas City, MO:

- Kisha N. Davis, M.D., MAFP President-Elect and NCSC New Physician Delegate, leader MAFP NCSC Delegation (see following segment announcing Dr. Davis’ election to the AAFP Board as New Physician Director for 2013-14).
- Shana O. Ntiri, M.D., NCSC Minority Physicians Delegate
- F. George Leon, M.D., NCSC IMG Physicians Delegate
- Mozella Williams, M.D., NCSC Women Physicians Delegate
- Kathy Byrne, M.D., NCSC GLBT Physicians Delegate
- Phaedra T. Ellis-Goods, ALF Manager, Membership and Conventions

### News For and About MAFP Members

**Dr. Williams Reflects on the 2013 AAFP NCSC**

The NCSC Was a First-Time Experience for Three of the Five Maryland Delegates to NCSC. I was one of them.

Honored to represent the "Women Physicians" constituency, I arrived to the NCSC to find a fast-paced, thought-provoking, sometimes confusing environment. Clearly it's a place where motivated and passionate family physicians meet annually (some for the past twenty years or more) to share their many ideas, and many more laughs. As a newbie, the agenda is daunting. The schedule is appropriately tight, full of meetings, drafting and voting to be accomplished. Oh, and if you want to run for a delegate position (as we were told on the fly) "...please submit your CV and nomination form by 5pm today, unless you want to run for a co-convener, then the deadline is 4pm..."

Though the NCSC was three days of flurry of reviewing AAFP current policy, drafting and editing new resolutions, and catching up with or networking with family physicians, it was easy to feel welcome. I would learn later that there were about 180 first-time attendees, a record for this meeting.

I met delegates from all over the country who had varied challenges and perspectives. I was surprised about the common, and uncommon, ground we shared. Probably the most heated debate within the Women's group was whether the AAFP should support over-the-counter oral contraceptives. Passionate testimony from both sides of this issue was heart-felt.

The highlight of the meeting was certainly hearing Dr. Davis' campaign speech, and then hearing her victory, for the 2013-14 New Physician Delegate to the AAFP Board of Directors (see next segment). Not only does Kisha have the temperance, wisdom, and integrity to represent New Physicians at the National Academy, she has the experience through her past leadership in the MAFP to strengthen and advocate for Family Medicine.

I would certainly encourage any of our MAFP members interested in policy matters around the five constituencies to attend this meeting. I predict you’ll have a great and productive time as I did.

Mozella Williams, M.D.
MAFP President-Elect Davis Elected to AAFP Board of Directors

MAFP President-Elect Dr. Kisha N. Davis was successful, among a field of four candidates, in her bid for AAFP New Physician Director during the 2013 AAFP National Conference of Special Constituencies (NCSC) held April 24-27 in Kansas City. Her term of 1-year will begin with her installation at the 2013 AAFP Congress of Delegates (COD) scheduled this Fall in San Diego.

Dr. Davis has been an active participant in the Maryland Academy since residency. She has maintained several positions on the Board and currently serves as President-Elect. She has been an enthusiastic chair of our Special Constituencies Delegation to NCSC and an active member of the Public Health Committee. She currently sits on the AAFP Commission on Governmental Advocacy and previously served as the AAFP New Physician Co-Convener and Delegate to COD. In addition she served as the AAFP Delegate to the AMA Young Physician Section.

She served as a White House Fellow which gave her a unique perspective on the role of health and medicine at the national level. In addition, her fellowship allowed her to experience firsthand the important role that Family Medicine can and should play in national health care decisions.

2013 UM Teacher Appreciation Dinner and Awards

The University of Maryland Department of Family and Community Medicine (UMDFCM) held its 2013 Annual Teacher Appreciation Dinner on May 8, 2013 in Timonium. Hosting the event were Richard Colgan, M.D. Professor and Director of Medical Student Education and Mozilla Williams, M.D., Assistant Professor and Associate Director of Medical Student Education. Featured speaker at the event was renowned teacher and author, Robert B. Taylor, M.D. who presented "Teaching in Your Practice: Creating the Best Experience for Your Student."

The following members received special awards of recognition during the event:

Richard Colgan, M.D. - Faculty Teaching Award

Randi E. Braman, M.D. of Owings Mills - Community preceptor Teaching Award

P. Hunter Spotts, M.D. of Baltimore, MAFP Foundation Trustee – Distinguished Benefactor Award

Conference on Childhood Obesity for Howard County FPs

If you are a physician who treats children and you live or work in Howard County, or if you see Howard County children in your practice, we invite you to join The Maryland Chapter, American Academy of Pediatrics for a special educational seminar, sponsored jointly with the Maryland Academy of Family Physicians.

This seminar will be held from 6:00-8:30 PM on Tuesday, October 1, 2013 at the Howard County General Hospital. Speakers include, Dr. Alan Lake and Dr. Sandra Hassink. These pediatricians are nationally recognized experts in teaching physicians about obesity and how to treat children with obesity within your practice.

This educational seminar will include dinner and all materials and is available to
you as a member of the Maryland Academy of Family Physicians at no charge as part of a grant received from the Horizon Foundation. The program is approved for 2 AAFP Prescribed Credit, applicable to AAFP/MAFP CME requirements.

Space is limited so please reserve your place today by emailing your contact information to Paula Minsk of the Maryland Chapter of the American Academy of Pediatrics. Paula can be reached at paula@mdaap.org or at 410-878-9702.

**Congratulations to MAFP Members for Special Appointments, Honors, Features, Achievements!**

**Joseph W. Zebley, III, M.D.,** of Baltimore, gave a presentation, along with Dr. Carol Ritter, to the University of Baltimore Health Policy Course on March 2, 2013. He also received a Community Service Award, with co-awardees Drs. Jim Novick and Carol Ritter, for the weekly Radio Show “The Medical Hour” (Sundays, WCBM-Baltimore) at the Baltimore City Medical Society Annual Gala and Presidential Installation at the B&O Train Museum on March 9, 2013.

**Lauren Gordon, M.D.,** of Baltimore, presented Reproductive Health Age Women in a PCMH at the Quality Improvement in a Medical Home Conference on March 28, 2013 hosted by the Maryland Learning Collaborative.

**Nancy Beth Barr, M.D.,** of Elkridge, was interviewed in a news segment discussing the FDA ruling of April 30, 2013 allowing for the sale of Plan B Contraceptive to anyone age 15 or over. The segment aired May 1, 2013 on WMAR-TV in Baltimore.

**News From the Department of Family and Community Medicine, University of Maryland School of Medicine**

Compared to a nationwide average of 8% Twenty students, 13 % of the University of Maryland graduating class, selected Family Medicine as a career choice!

First year Family Medicine resident, Peter M. Burkhill, M.D. was inducted by the 2013 medical school graduating class into the Gold Humanism Honor Society.

Shana O. Ntiri, M.D. and Julio Menocal, M.D. were also inducted into Alpha Omega Alpha by the UMSOM 2013 graduating class.

Mozella Williams, M.D. and Katye Conniff, M.D. were chosen by this year’s graduating medical school class to serve as faculty and student marshals.

Richard Colgan, M.D., Vice Chairman of Medical Student Education and Clinical Operations has been promoted to Professor of Family and Community Medicine.

**MAFP Members at STFM Conference in Baltimore**

The following members, faculty and residents from the Medstar Franklin Square Medical Center, the Georgetown University and the University of Maryland Family Medicine Residencies presented at the Society of Teachers of Family Medicine held May 2-5, 2013 at the Marriott Waterfront Hotel in Baltimore:

**Franklin Square Medical Center**
Nancy Beth Barr, M.D.
Michelle Cardona, M.D.
Michael Dwyer, M.D.
Lauren Gordon, M.D.
J. Michael Niehoff, M.D.
Emily Richie, M.D.

**Georgetown University**
Kenneth Lin, M.D.

**University of Maryland Medical Center**
Kevin P. Carter, M.D.
Sharon Feinstein, M.D.
Jonathan Gibson, M.D.
Yvette L. Rooks, M.D.

**In Memory**

The Maryland Academy of Family Physicians is saddened by the passing of its members

**Rizalito A. Amarillo, M.D.,** Hagerstown
**Leon W. Berube, M.D.,** Mechanicsville
**James P. Jarboe, M.D.,** Hollywood
**Kenneth B. Kochmann, M.D.,** Cockeysville
**John L. Morgan, M.D.,** Towson
**George E. Way, M.D.,** Hagerstown

Memorial contributions have been made to the MAFP Foundation in their honor.
Welcome New and Transferred Members  February 1, 2013 – April 30, 2013

Active
Vanessa M. Allen, M.D.
Rubina Alvi, M.D.
Meenakshi G. Brewster, M.D.
Matthew T. Burke, M.D.
Avril M. Campbell, M.D.
Shikha N. Deva, M.D.
John W. Dougherty, D.O.
Rubina A. Edmonds, M.D.
Latoya L. Edwards, M.D.
Richard A. Ferguson, M.D.
Tracy D. Givens, M.D.
Katherine J. Jacobson, M.D.
Elisa Jaramillo, M.D.
Megan C. King, D.O.

Vijaya K. Kommineni, M.D.
Robert J. Levine, D.O.
Jessica G. Lue, M.D.
Courtney H. Morrow, D.O.
Sandesh Pandit, M.D.
Michael E. Pitzer
Casey Rice, M.D.
Bikram Saini, M.D.
Elizabeth M. Salisbury Afshar
Jessica M. Shreve, M.D.
Rebekah A. Valjejos
Kara Odom Walker, M.D.
Stephen Wreesman, M.D.

Resident
Adina Cappell, M.D.

Student
Elizabeth A. Allen
Danielle P. Baruch
Jared S. Cohen
Jennifer Y. Colgan
Sira Gaddam
Paveen George
Matthew J. Grant
Johnny D. Guzman
Vedrana Hodzic
Patricia Hong
Rebecca Johnson-Paben

Christine Lim
Andrew McGrain
Stephanie E. McLaughlin
Kathryn Miele
Luis A. Murillo
Bryant P. Nelson
Trang Nguyen
Dionne Rebello
Peter Riley
Sajewane M. Seales
Victoria Rudd
Scott B. Shapiro
Laurel N. Slongwhite
Amber Taylor
Lauren Thomaier
Juliana Wu

MAFP 2013 Winter Conference, Considerations in Patient and Physician Safety
February 23, 2013 - Photo Reflections

Drs. Howard Wilson and Kristen Clark (looking at laptops) lead MAFP Self Assessment Module on Preventive Health

Dr. Laura Herrera, Under Secretary for Primary Care at the Department of Health and Mental Hygiene discussing Health Reform Initiatives in Maryland

Gun and Domestic Violence Panel discuss issues and realities: (l-r) trauma surgeon Dr. Edward E. Cornwell, Howard University; Baltimore County Det. Chris Hodnicki; trauma surgeon and Director, UM Shock Trauma Center Thomas M. Scalea; psychiatrist Dr. Christopher J. Welsh.

MAFP President Dr. Yvette Oquendo-Berruz presenting to Dr. Richard Colgan the MAFP Award of Special Recognition for his 12-year run as Editor-in-Chief of The Maryland Family Doctor Publication.
AAFP/MAFP CME Requirements for Active/Supporting Members

Active and Supporting Family Physician Members must accrue at least 150 hours of AAFP Prescribed and Elective credit within each 3-year reporting period, of which:

- At least 75 must be AAFP Prescribed credit; of which at least 6 of those being obtained from MAFP sponsored programs every 3 years (eg. CME conferences and journal CME).
- At least 25 are from live learning activities
- Not more than 25 are from enrichment activities
- Not more than 30 are from presentation or publication of an original scientific or socioeconomic paper pertaining to medical care
- Not more than 45 are from publication in a state or national "refereed" journal
- Not more than 15 are from preparation and presentation

Members are encouraged to review the document AAFP Continuing Medical Education Requirements for Members at http://www.aafp.org/PreBuilt/cmea_memberrequirements06.pdf or contact the MAFP office to request a copy; office @mdafp.org.

The AAFP will send Maryland Chapter members, at regular intervals, correspondence showing each member’s reported number of hours and reminding members of what is required. All details about the AAFP/MAFP’s CME records, reporting and information can be obtained thru the AAFP web site at www.aafp.org/cme, toll free at 800-274-2237 (ask for the CME Records Department) or the MAFP at 410-747-1980; info@mdafp.org (e-mail).

Other Aspects of MAFP CME Policy

The MAFP Board of Directors has approved the following:

1. MAFP members who are faculty members at MAFP conferences may claim the credits for those sessions (even if they are not registrants) for the MAFP CME requirement.
2. MAFP members who are authors of CME articles published in The Maryland Family Doctor may claim those credits (according to AAFP policy; www.aafp.org) for the AAFP and MAFP CME requirements.
3. MAFP CME credits will be waived for those Active and Supporting members who relocate to the Maryland Chapter within 6-months of the end of their cycle of AAFP reelection.
4. Active and Supporting members who have not met the chapter requirement to report at least 6 chapter credits within their AAFP reelection cycle may receive a waiver for that cycle, to be made up in the subsequent AAFP Reelection cycle, by following the process noted below:
   1) Member must contact the MAFP office submitting a request (written, email, phone call) for a one-time waiver for the chapter requirement indicating a desire to continue membership, pledging to acquire the credits during the next AAFP reelection cycle. There is a waiver request administrative fee of $50.
   2) Member must make up waived credits in the subsequent AAFP reelection cycle (in addition to the required 6 credits).
   3) If failing to acquire the required chapter hours in the subsequent AAFP reelection cycle, MAFP will not accept another waiver request from member.
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