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Joint National Committee (JNC) Reports and Systolic Blood Pressure Intervention Trial (SPRINT) Update

To the Editor:

Shortly after presenting the Lasker Award to Edward D. Freis, MD at the first national report on antihypertensive management, Theodore E. Cooper, MD, Director of the National Heart Institute, initiated a new series of periodic JNC Reports on the Diagnosis, Evaluation, and Treatment of Hypertension. Dr Freis was the principal investigator, primary author, and director of the Veterans Administration Cooperative Studies of the Diagnosis and Treatment of Hypertension, the first double-blind, multicenter, controlled cardiovascular study.

Since then, 8 subsequent JNC reports have been published, demonstrating the progressive improvement in the diagnosis and treatment of hypertension. JNC6 was published in 1997 and JNC7 in 2004. All clearly identified that the goal of medication treatment for patients with hypertension was 140/90 mmHg and, later, 130/80 mmHg for patients with diabetes or chronic renal disease (CRD). Particular references were identified in JNC7 with an evidence-based guidelines scheme. Of considerable importance in each JNC report was the identification of medical recommendations based on therapeutic endpoints (eg, stroke, coronary heart disease, cardiac or renal failure)—all identified through clinical, multicenter, double-blind trials from the outset, following controlled treatment protocols.

Each JNC trial blood pressure (BP) goal was identified from the outset. However, JNC8 introduced a significant change wherein subjects 60 years of age and older, as well as persons 30-59 years of age and patients with diabetes or CRD, were indicated for a BP of $\leq$150/90 mmHg. A significant minority report refuted the $\leq$150 mmHg goal for patients $\geq$60 years. The minority report initiated much controversy, so the National Institutes of Health (NIH) subsequently transferred future JNC preparation to the American College of Cardiology (ACC) and the American Heart Association.

However, in 2009, the SPRINT study was initiated including >9,300 participants (100 medical centers), including women, racial/ethnic minorities, and older persons. Between 2010 and 2013, these participants were randomly divided into 2 groups according to goal systolic BP: Group 1 received an average of 2 medications to achieve goal systolic BP <140 mmHg, and Group 2 received an average of 3 medications to achieve goal systolic BP <120 mmHg. The NIH discontinued the study earlier than stated to release the preliminary results. Subjects in Group 2 who were targeted with a goal systolic BP of <120 mmHg demonstrated a decreased rate of cardiovascular events (eg, heart attacks, heart failure, stroke) by almost one-third and deaths decreased by almost one-quarter compared to subjects in Group 1 whose goal systolic BP was <140 mmHg.

In light of these outcomes, I agree with the value of the NIH press release of September 11, 2015 concerning SPRINT.[1] However, I withhold a more definite and full endorsement until the final report, including all necessary data and/or statements, is published. Until then, I support the valuable contribution by the JNC8 minority report published after the release of JNC8. The goal of $\leq$140 mmHg for antihypertensive treatment of patients $\geq$60 years without diabetes or CRD is most important. A follow-up NIH report in which the SPRINT findings, nonpharmacological measures for hypertensive patients, and the membership of the future committee are provided is welcome.

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Author's Commentary: The author has personally participated in the preparation of JNC reports (JNC1 through JNC7, including the first meeting of Dr Cooper) until he voluntarily retired from the JNC after 32 years. After publication of JNC8, he expressed his concern about the recommendation of the goal BP of $\leq$150 mmHg. He supported the minority committee's report at the most recent annual ACC meeting (2014), specifically concerning the goal BP $\leq$150 mmHg, the exclusion of nonpharmacological therapeutic recommendations, and failure to identify the JNC8 (2013) committee's organizational membership.

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Comment on Multiple Unilateral Traumatic Carotid-Cavernous Sphenoid Sinus Fistulas with Associated Massive Epistaxis: A Consequence of Parkour

To the Editor:

Today I discovered this article on your website, "Multiple Unilateral Traumatic Carotid-Cavernous Sphenoid Sinus Fistulas with Associated Massive Epistaxis: A Consequence of Parkour."[1]

This title is not accurate, is offensive to practitioners of Parkour, and tarnishes your journal's reputation as well as that of all of the authors.

Probably more than 99% of practitioners don't train at heights, only ground level. Many of us train for health, empowerment, spiritual pursuits, community, etc. This particular case is incredibly rare, so to use such a gross generalization and call "multiple unilateral traumatic carotid cavernous sphenoid sinus fistulas with associated massive epistaxis" a consequence of our disciple/art form is incredibly unscientific. It should state rather, "A Consequence of Head Trauma," "A Consequence of a Fall From 10 Meters," or something more accurate, seeing how readers uneducated about Parkour will naturally draw a negative connotation of the entire discipline from the title.

I hope this gets to the right people who will make the necessary changes so that we may all benefit.

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Author's Reply to Mr Rendao

We respect the fundamental philosophies of Parkour, which at its core is about overcoming and adapting to mental and emotional obstacles as well as physical barriers. While the title of our article was never meant to be offensive to the *traceurs* of Parkour, we have an obligation to accurately report the mechanism of injury that resulted in our patient's life-threatening condition.[1] The title allows one to have knowledge of such injury resulting from Parkour and can help the athletes and medical practitioners to avoid further occurrences in the future.

It should be noted that injuries related to Parkour are underreported in the literature, according to the American Sports Medicine Institute. As this excerpt from *The Washington Post* states, from a *traceur* after sustaining injuries at a National Parkour Jam, "This isn't the image we want for Parkour," a sentiment shared and echoed by his peers.[2] Despite the perception desired by the Parkour community, the art form is not without risks and can result in significant morbidity and mortality in rare cases. In a 2014 article published by Derakhshan et al,[3] the unfortunate case of a 24-year-old male who became quadriplegic after suffering a cervical spine injury (C4-C5 subluxation with locked facets and spinal cord compression on magnetic resonance imaging) was reported. Interestingly, this author was also criticized and asked to amend the title of his article in a subsequent letter to the editor.[4] It is clear that athletes such as Mr Rendao are passionate about their art and advocate for a better image of the sport.

Last, it should be restated that our patient fell 3 stories while transitioning to another building. Despite Mr Rendao stating that 99% of practitioners don't train at heights, the actual number is not truly known. It is clear that performing at heights continues to be an occurrence, based on hospital reports and media sources, despite being discouraged by some practitioners of Parkour. Interestingly, practicing at heights has been depicted in films such as *District 13* that stars David Belle, who is considered a founder and leading pioneer of the discipline. In 2014, a young male practicing Parkour fell from the seventh floor of a building while attempting to cross over to the next building, resulting in his death.[5] Despite the rarity of morbidity and mortality related to these cases (eg, spinal cord injury and death related to traumatic brain injury),[3,6] there is still an inherent risk that one must be aware of when performing the acts and maneuvers in Parkour.

As Parkour continues to gain popularity in the United States and around the world, physicians will encounter more traumatic Parkour injuries. It is important to be familiar with this new activity in order to not only understand the nature of a patient's injury but also to counsel patients on proper safety and the potential risks of this activity.

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Bee Stings and Chronic Pain

To the Editor:

The practice of using bee stings to treat chronic pain is widespread. There are different ways to adopt this practice. Patients sometimes get the bee sting at the beekeeper place, and sometimes they buy the bees, take them home, and use them over a certain period of time. Veterinarians use this same practice to treat pain in animals. While this practice is ongoing and known by many patients, unfortu-

nately there are no clear published data about this practice or its results and complications.

Reviewing the literature, there has been some research done on using bee venom for pain management, but the exact mechanism is not exactly understood, and published articles are not conclusive. The use of bee stings for pain management can be very risky as the bee sting could lead to a fatal reaction. Patients should be encouraged to avoid this kind of treatment until it is provided in a safe fashion after passing the regulatory processes to prove its safety.

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Comment on Pulmonary Hypertension in a Patient with Congenital Heart Defects and Heterotaxy Syndrome

To the Editor:

We read with great interest the case reported by Yousuf and colleagues of a young man with an atrioventricular septal defect and bodily isomerism (hereafter referred to simply as isomerism) found to have pulmonary hypertension.[1,2] The authors state that pulmonary hypertension is infrequent in the setting of isomerism, a statement that is inaccurate. Review of data from the 2012 iteration of the Nationwide Inpatient Sample (NIS) results in 6,906,248 patients without isomerism and 861 patients with isomerism. Pulmonary hypertension was present in 5.6% of those with isomerism and in 2.6% of those without isomerism (odds ratio 2.254, 95% confidence interval 1.684 to 3.015). Multivariate analysis including age, sex, specific cardiac anomalies, presence of asplenia, and heterotaxy demonstrated that heterotaxy remained an independent predictor of pulmonary hypertension (odds ratio 1.789, 95% confidence interval 1.248 to 2.566). Average age of admission during which pulmonary hypertension was present was 33 years in those with and 71 years in those without isomerism. Additionally, admissions associated with pulmonary hypertension had longer lengths of stay and greater costs for those with isomerism. The prevalence of pulmonary hypertension is consistent with previous reports of 4% to 28% in adult patients with congenital heart disease.

These findings should not come as a surprise as isomerism is often associated with complex congenital malformations of the heart that require univentricular palliation. These children ultimately have completely passive systemic venous return into the pulmonary arteries and have been demonstrated to be at significantly increased risk for pulmonary hypertension due to changes in the pulmonary vascular bed inherent to this type of circulation.[3] Thus, as these patients enter adulthood, it is not surprising to find such pulmonary hypertension. Additionally, patients with isomerism are at risk for ciliary dyskinesia, in which there is abnormal motion of the cilia in the setting of normal ultrastructure.[4,5] The link between this and pulmonary hypertension has not been formally studied yet although it has been associated with worse sinopulmonary outcomes and thus may play a role in the development of pulmonary hypertension. While thrombocytosis may be present in the setting of functional asplenia, this is often very early in life.[6] Indeed, data from the nationwide inpatient sample show no difference in the prevalence of thrombocytosis in those with and without isomerism, making this less likely the mechanism.

Of final note, the authors state quite high mortality associated with isomerism. It is important to note that in the study (by Bartz and colleagues) they reference several patients from an older era.[7] Subsequent studies, including a soon-to-be-published pooled survival analysis of 2,293 patients with isomerism, demonstrates 50% survival at 17 years of age when all patients were included and 70% survival at 13 years of age when only patients operated on after 2000 were included.[8] Survival for patients with biventricular circulation, such as the reported patient, was found to be 95% at 18 years of age.

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Author's Reply to Dr Loomba

Correctly stated in the letter to the editor, pulmonary hypertension is frequently associated with heterotaxy syndrome. We would like to amend our previous statement to state that pulmonary hypertension carries a worse prognosis and longer length of stay in the hospital for patients with isomerism; therefore, clinicians should be keen of this potential independent risk factor for developing pulmonary hypertension.

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Editor's note:
The article in question—"Pulmonary Hypertension in a Patient with Congenital Heart Defects and Heterotaxy Syndrome"—will be corrected prior to print publication.

RETRACTION

Retraction of Diaz JH. Rhabdomyolysis after cooked seafood consumption (Haff disease) in the United States vs China. *Ochsner J*. 2015 Summer;15(2):170-175.

The Ochsner Journal has learned that prior to publication in *The Ochsner Journal*, the author previously published essentially the same paper in the journal *Clinical Toxicology*: Diaz JH. Global incidence of rhabdomyolysis after cooked seafood consumption (Haff diease). *Clin Toxicol (Phila)*. 2015 Jun;53(5):421-426. doi: 10.3109/15563650.2015.1016165. Epub 2015 Mar 19. Therefore, *The Ochsner Journal* retracts the paper.