SAFE TRAVELS

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When we think of travel, the first thing that comes to our minds is the enjoyment that goes along with it, especially if the destination is somewhere in the beach, mountains, or more excitingly, on an exclusive island! In the summertime, it is almost a must that families plan a trip out of state. Most of the time, this usually entails a long drive or a plane ride. The majority of people choose to travel by land than by air for obvious economic reasons. Unfortunately though, it is not a common notion that accidents occur more often via land than air travels, and are accompanied by high mortality rates. This article is not meant to scare land travelers, but is more to educate on the avoidable accidents and the injuries sustained from such mishaps.

As a specialist of Physical Medicine and Rehabilitation (a.k.a. Physiatry), there are a few MVA injuries that I commonly encounter. First on the list are the traumatic brain injuries (TBIs). Survivors often suffer from many disabilities which often leave them handicapped and dependent on others. The neurocognitive deficits these patients suffer from render them less functional and unemployable at the worst. In addition, spinal cord injuries also result in drastically severe disabilities. If it affects the patient's cervical (neck) spine, he may end up with quadriparesis (paralysis from the neck down). If it affects the thoracic (midback) spine or lumbar (lower back) spine, patients may end up with paraparesis or paralysis from the waist down. The extent of the paralysis or weakness depends on the level and severity of the injuries. If brought immediately within the critical window period, the disability decreases accordingly. This is the reason why it is very crucial that these victims be driven or flown immediately to the nearest trauma center. The rehabilitation after the immediate management/surgeries requires a multidisciplinary approach to reduce morbidity from the physical and psychological problems attendant with the injury, which often cost millions to billions of dollars.

Fractures are not uncommon in MVAs especially if the impact is so heavy causing the patients' bodies to hit the hard immobile parts of the vehicle. All patients sustaining high energy blunt injuries are assessed to have a pelvic trauma until proven otherwise. For extremity injuries, the long bones have to be stabilized as early as possible to prevent further complications. Due to their need to remain in bed for a long time, these patients are prone to developing blood clots (DVT or deep vein thrombosis). Blood clots can embolize (become dislodged) to either the lungs or brain and can be the immediate cause of death for these patients. However, this is prevented by carefully titrated blood thinners. Another way to prevent this is early mobilization through physiotherapy, thereby facilitating the patients' return to their prior level of function.

In cases of sudden acceleration/deceleration injuries, the patients usually present symptoms compatible with sprain/strain and contusion of the spine, the extremities, and the chest or ribcage. The knees usually hit the dashboard, while the shoulders bang against the doors or the partitions. The neck commonly sustains whiplash injuries from the repetitive forward and backward movements of the head upon the sudden stop. The same mechanisms impact the mid and lower back which oftentimes lead to herniated discs. If the head is shaken vigorously or hits the airbag that deployed, patients can suffer from concussive symptoms such as headaches, dizziness, nausea/vomiting, photophobia (light being bothersome), balance disturbance, and even transient amnesia.

After being discharged from the emergency room, the above-mentioned patients are subsequently referred for physical rehabilitation. Magnetic resonance imaging (MRI) studies are considered when herniated discs or soft tissue injuries in the spinal column and intraparenchymal pathology (especially bleeding) in the head are suspected, which are often hinted at by the patient's persistent neurological complaints. Repeated X-rays or CT scans are recommended if occult (not easily detected) fractures are a possibility. If no contraindications are determined, the patients are started on conservative treatments such as physical/occupational/speech therapy, acupuncture, chiropractic treatments, along with pain/anti-inflammatory medications and muscle relaxants. After a few weeks, the patients are re-evaluated and if the conditions do not improve considerably, further studies may be ordered. Electromyographic studies (nerve and muscle tests) are the gold standard in localizing and quantifying a presumed "pinched nerve," for which patient may benefit from epidural injections or nerve blocks for better pain control.

Steroid injection to the affected joints (usually the shoulder, knee, hip, and ankle) are given if the ultrasound shows any internal derangement (partial tears, inflammation of tendons, bursitis, joint effusion). For failed injections to the spine, the patients are then referred for necessary surgical evaluation. The real indications for surgical intervention are strictly as follows: severe disabling pain affecting the patient's daily activities and functions specifically the ability to gainfully work, severe weakness or paralysis of muscles, severe numbness or inability to feel imposing danger of getting burned or cut unknowingly, and loss of control of the bladder or bowel. Without enough attention, about 25% of these patients easily develop psychological disturbances such as nightmares, phobias of going out, and suffer from post traumatic stress disorder (PTSD).

Protective devices are continuously being developed and redesigned in automobiles to help decrease the alarming increase in the morbidity and mortality rates related to MVAs. Airbags provide a decrease in fatality of about 30% in purely frontal accidents and a decreased risk of death of about 11% in all types of crashes. As the adage goes, "an ounce of prevention is better than a pound of cure." It is therefore a prerequisite that before heading the road, we must check our automobiles to stave off accidents. Adhering to the traffic rules, specifically not

going beyond the speed limit (specially the very young drivers), deserves the highest emphasis. Driving under the influence of alcohol cannot be underemphasized as it hurts not just yourself, but all passengers involved. Postponing or cancelling a trip during bad weather conditions will definitely save lives. Just keep in mind that you are going out on a trip to enjoy and have fun, not to end up in an emergency room. As most believers do, let us not forget to implore the divine protection of our Creator to keep us away from danger. And if we just carefully follow these precautions, everybody can surely enjoy their trips as enthusiastically planned.