Managing the most common inflight injuries

By Jennifer Garr RN, BSN

Passengers come in all shapes and sizes, along with their baggage, and their pre-existing health conditions. Human nature also means that passengers are prone to accidents during travel.

Consider the passenger observed by flight crew who, during the flight, is working against the forces of nature to retrieve his carry-on luggage from an overhead bin or below the seat in front of him. The twisting, turning and jerking motions are often a precursor to musculoskeletal injury – the most common type of which is moderate to severe back pain. Other musculoskeletal injuries involve the neck and shoulders.

Understanding the most common injuries that occur on board commercial aircraft – as well as basic treatment techniques – will help flight crew better manage routine medical situations.

Whether on the way to the airport, or already on the flight, passengers moving and lifting heavy baggage can cause themselves musculoskeletal injuries.

Musculoskeletal injuries

Passengers with a history of back pain are the people most likely to be acutely impacted by the pushing and pulling of luggage. The pulling action is sometimes a trigger for future back pain because of the simultaneous extension and twisting of the muscles that support the spine. One good 'tug' of the luggage can spring the passenger's weight forward causing strain to the neck and shoulders. These strain injuries are painful but usually minor in nature and are relieved with ice to the area, as well as rest.

Burns

Burns cause damage to one or more layers of the skin, decreasing the skin's natural protective function and increasing the risk for infection. Scalding burns are the most frequently occurring on board aircraft and are usually caused by hot liquid spills.

Minor burns can be treated by removing the hot agent and immediately applying a cold compress to the burn. Ice should not be applied directly to the burn, as doing so will cause further injury. To determine severity, the crew should assess the size of the burn. If the burn is larger than the size of the victim's palm, crew should seek urgent medical advice from a telemedicine provider or airline medical staff to decrease the risk of further damage and infection.

Head injuries

Head injuries often occur as the result of heavy luggage and objects falling from an overhead bin. Head injuries are also likely to be caused from falls against a hard surface during periods of severe turbulence. The resulting injuries are generally minor, including cuts, scrapes and bruises that can be treated with basic first aid measures. Crew may apply direct pressure to the bleeding wound or, for contusions (bruises), administer ice – combined with elevation of the affected area.

If the head injury appears to be serious in nature, and the passenger displays a decreased level of consciousness or becomes increasingly confused, quick assessment is required. Signs and symptoms of a severe head injury include nausea or vomiting, drowsiness, memory loss, confusion, visual disturbances, brief or partial loss of consciousness and possible complete loss of consciousness. Head injuries associated with significant neurological symptoms – unequal pupils and spatial disorientation to day, time and place – also require contact with a telemedicine provider who can offer medical insight regarding severity, allowing the pilot to determine if diversion is necessary.

Other injuries requiring assistance from a telemedicine provider include uncontrollable bleeding of a wound, despite direct pressure, and serious blunt abdominal injuries that cause paleness and worsening pain.

With proper first aid and appropriate assessment, aircraft diversion for most inflight injuries is highly unlikely. Prepared crew will recognise the medical conditions that are too risky to treat without professional medical advice. ■

As manager of medical operations for MedAire's Global Services divisions, Jennifer Garr has extensive experience in remote medical assistance, including critical medical evacuations, the transport of passengers with special medical needs and the repatriation of mortal remains.

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