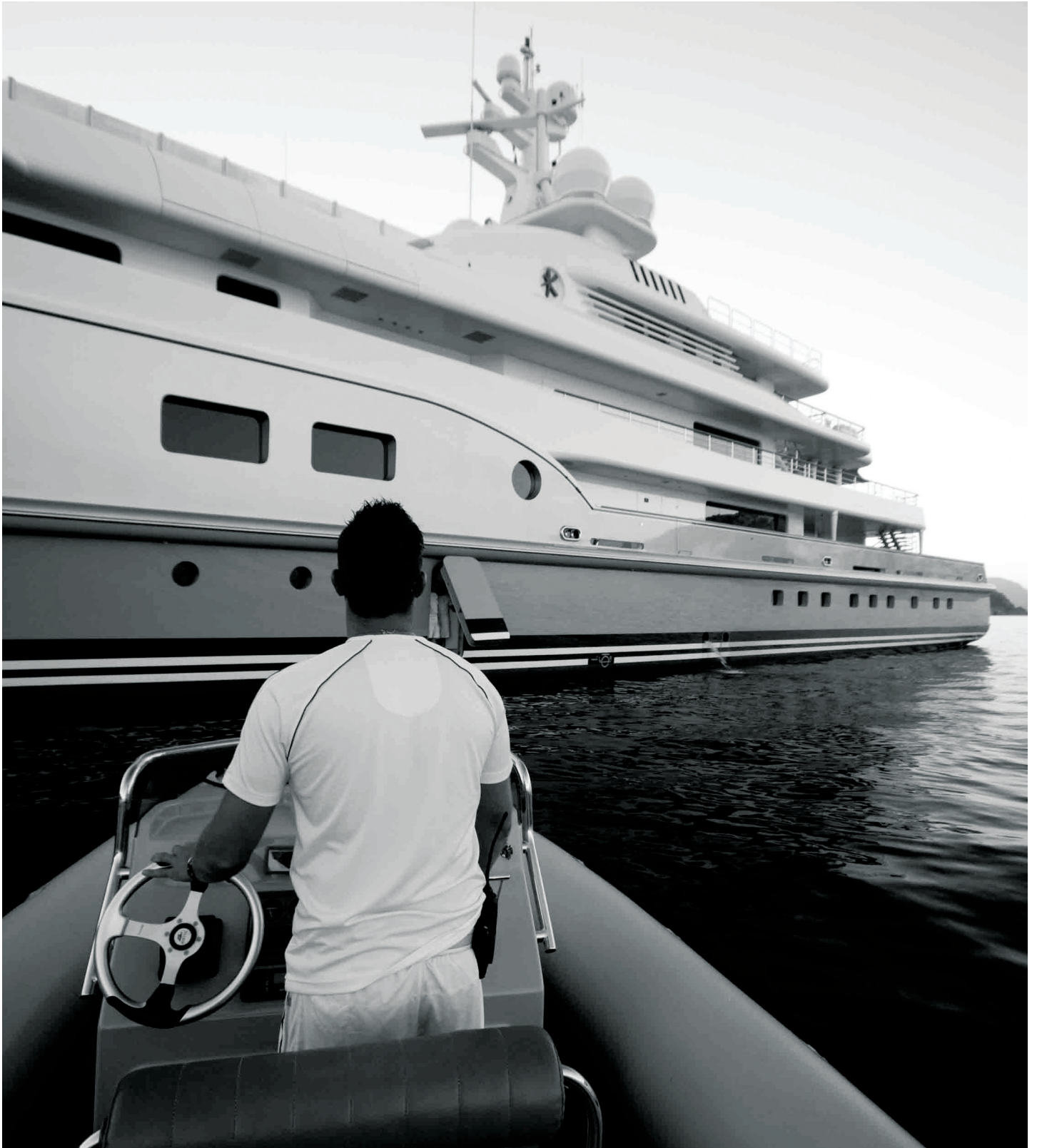


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REPORT



Head Injury – When is it Serious?

Many of us suffer the occasional bump on the head from low ceilings or slipping on a wet surface and think nothing of it. However the potential for a more serious knock on the head is very real and it is important to be able to gauge the seriousness of such a collision. Robb Leigh MD guides you through the important steps for judging when a head injury is serious.



When you are at sea for weeks or months at a time, rough waters and slippery decks can cause more than their share of slips and trips, potentially resulting in blows to the head. Even your guests, when spending a day ashore hiking and cycling or in the water swimming and jetskiing, could suffer a seemingly benign head injury.

So, how do you know when a head injury is serious?

Minor head injuries resulting in no symptoms except minor localised pain that subsides rapidly are of little consequence. Conversely, injuries with prolonged loss of consciousness, fractured skull or extrusion of the brain matter are obviously life-threatening and often fatal. What about those injuries that fall between the extremes? What if cuts, bruises and abrasions are visible? What if a victim has neurological symptoms, despite the appearance of initial stability?

A general understanding of the brain and the symptoms associated with head injuries can help crew respond appropriately to such scenarios. Although the human brain is very fragile, it is contained in a hard shell and “floats” in an aqueous medium called cerebrospinal fluid, which absorbs mild to moderate impacts. Even though large cuts and bruises on the scalp or face may look ominous to crewmembers, doctors know that such wounds may be superficial. In such instances, a trained shoreside doctor can help you assess the possibility of internal damage or other life-threatening injuries, such as cervical spine (neck) fractures.

Types of Head Injury

Minor head injury is likely to be present when the impact occurs on a carpeted surface; the fall is from a height less than the individual's height; no loss of consciousness occurs and the person has normal neurologic function, including alertness and good orientation, as well as normal speech and gait.

Serious head injury is likely present when neurological status does not return to normal within two hours of injury and in those who have vomited more than twice. Individuals who have a depressed skull fracture or a fracture at the base of the skull (indicated by clear or blood-tinged fluid drainage from ears or nose) as well as individuals over 65, are also at greater risk for serious head injury. Whenever alcohol or drug ingestion is suspected, head injuries should be assumed to be severe until careful examination and tests can effectively rule out serious conditions.

The term *concussion* is used to describe a closed head injury that temporarily interferes with the brain's function but without signs of structural damage. The severity varies, and the symptoms may include loss of consciousness or problems with memory, judgement, reflexes, speech, balance and coordination. In these situations, and when delayed loss of consciousness occurs (where the individual is knocked out initially, regains consciousness, then passes out again later), the injury should be considered serious enough to warrant a medical evaluation. These additional symptoms also signal a need for medical attention:

- Severe headache
- Confusion that does not improve
- Extreme drowsiness or weakness
- Inability to talk or walk
- Inability to remember the accident
- Perseverating (repeating the same thing over and over)
- Lack of consciousness after two minutes

Head injuries in individuals who are known to be taking blood thinners should also be considered serious.

Managing a Head Injury

Because cervical spine injuries commonly occur in association with head injuries it is paramount to first immobilise the spine by using the hands, backboard and tape – or by applying cervical collars when appropriate. Once the person is deemed mentally stable, is able to move all extremities and can point to painful areas, further assessments can be made regarding severity. If available, consultation with land-based physicians will assure proper steps are taken to stabilise the patient and assess the need for further evaluation in a hospital setting.

The good news is that head injuries can be prevented when extra precautions are taken. Crewmembers and guests should always be advised to use the handrails, wall or other immovable objects when walking on slippery surfaces.

Images courtesy of Istockphoto.com

Ask the Doc

Q: Are medicines available on the internet safe?

A: Yes and no, depending on the source. If the seller is a reputable pharmacy within the US, it is probably just as safe as buying from your local pharmacy. Alternatively, if the seller is an unknown or unrecognisable entity from overseas, you face a big risk when acquiring medicines.

There are endless documented cases of people purchasing counterfeit medicines from overseas that can vary from a weak version of the real medicine to an entirely different substance. The level of quality control in the US from the Federal Drug Administration (FDA) is virtually non-existent in many parts of the world. As a result, many creative “entrepreneurs” abroad are manufacturing medications with sugar, flour, talcum powder and anything else they can shape into a pill. This creates two major problems. First, the adulterated pill may not have any active ingredient, causing a false sense of security – a huge problem if treating a heart condition or malaria. Second, the pill can contain something toxic instead of the real medicine. For example a children’s cough syrup was discovered to have been made with ethylene glycol (antifreeze), resulting in more than 100 deaths in Haiti and India in the 90s. An extra dose of caution is necessary if you are considering buying from an online pharmacy.

Have a medical question? Email Dr Leigh via info@thecrewreport.com and his response to your question may appear in a future issue of The Crew Report.

Medical kit update: Aspirin

Aspirin or acetylsalicylic acid (ASA) is probably the second most important drug in human history, after penicillin. Used by billions, it has an unmatched track record, having saved countless lives. It is well tolerated by most, especially if taken with food. Side effects such as gastrointestinal bleeding and tinnitus can occur with higher, long-term doses. It can cause allergic reactions and, rarely, a condition called Reye’s Syndrome, which may occur in children under 19 with viral illnesses and fever. There are neurological manifestations with long-term consequences, including fatalities – thus doctors advise against aspirin use in children with fever. However, if taken properly and under the supervision of a physician, aspirin can help control heart disease and even save a life.



Robb Leigh MD is a practising emergency physician and chief medical officer for MedAire Inc, working closely with the company’s maritime clients to provide consistent and continuous case management oversight. www.MedAire.com