Management of the Intoxicated Patient in the Emergency Department

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Emergency physicians (EPs) must be well versed in the management of the intoxicated patient because EDs have become the "drunk tank" and the health care safety net for American society. In order to properly manage the alcohol-impaired patient, the EP must understand several important clinical and medicolegal principles. This is a high-risk presentation, and the EP must be extremely diligent in order to provide the highest quality of patient care, diagnose co-existing, life-threatening disorders, and protect the patient’s constitutional rights.

A review of the literature indicates that there are no clear-cut guidelines for the EP’s management of the intoxicated patient. These patients present to the ED with an altered mental status, often express suicidal ideation, and, at times, are belligerent and physically violent. Frequently, police, family, or friends bring these patients into the ED against their wishes, and patients refuse medical care. This presents the EP with very difficult "refusal of care" issues.

The alcohol impaired patient often lacks insight into his condition; thereby, making it difficult for the physician to accurately diagnose and treat underlying medical illness. EPs must not assume that a "regular" patient is simply "drunk again." One must always assume the alcoholic patient is "hiding" some potentially life-threatening pathology until proven otherwise. In order to ensure patient and staff safety, the EP must be prepared to apply physical or chemical restraint and isolation when warranted. An understanding of the medical and legal issues will assist the EP in acting confidently and competently in providing optimal patient care and protecting the patient against the risk of injury and subsequent litigation.

The following issues will be discussed: 1) whether blood alcohol levels are required in all patients; 2) general management of the intoxicated patient; 3) "against medical advice" (AMA) in the "alcohol impaired patient;" 4) physician use of restraint and forced treatment; 5) clinically clearing patients for discharge; and 6) high-risk cases and risk management.

Chemical Overview

Ethanol is a selective central nervous system (CNS) depressant at low doses and a general depressant at high doses. At the highest blood alcohol levels, there is loss of protective reflexes, coma, and increased risk of death from respiratory depression. There is a narrow margin between the anesthetic and fatal dose; deeply
intoxicated patients are near death and must be managed aggressively. Chronic alcoholics with a developed tolerance may appear sober at a level of 300 mg/dL; whereas, an adolescent with a level of 200 mg/dL may present with respiratory arrest.

A "standard drink" (equivalent to a glass of wine, a shot, or a 12 oz. beer) increases the blood alcohol by 25-35 mg/dL. Lethal doses of ethanol are reported to be 5-6 mL/kg in adults and 3 mL/kg for children. The LD 50 (the "lethal dose" level at which half of those patients with this blood alcohol level would die) in the nonhabituated patient is approximately 500 mg/dL. More than 90% of ethanol ingested is eliminated by enzymatic oxidation, with only 5-10% excreted unchanged by the kidneys and lungs. The alcohol dehydrogenase system is the main pathway for ethanol metabolism in the body and is the rate limiting step. Ethanol is metabolized initially by first-order kinetics. As the system is saturated, it moves to zero-order kinetics (fixed amount metabolized per unit time). This nonlinear or saturable enzymatic reaction is classified as Michaelis-Menten kinetics. At that point, the level will fall by 15-45 mg/dL/h.

Ethanol is a dialyzable substance in cases of potentially lethal ingestion. There is no antagonist to alcohol currently available. Neither naloxone or flumazenil have been shown to reduce the effects of alcohol. There is a new direct alcohol dehydrogenase inhibitor, 4-methyl pyrazole (4-MP), that may soon be available for toxic ingestions of methanol or ethylene glycol. Studies have shown that 4-MP in a dose of 10-20 mg/kg produces a 40% reduction in the rate of elimination of alcohols. It is unlikely that a true ethanol antagonist will ever be discovered.

General Management of the Intoxicated Patient

The intoxicated patient warrants a thorough history and physical. Although it seems obvious, these patients should be undressed, and the EP should view all body surface areas. Intoxicated patients may present with trauma, hypoglycemia, hypothermia, hepatic encephalopathy, sepsis, electrolyte abnormalities, ethanol withdrawal, Wernicke-Korsakoff syndrome, or co-ingestions. Despite intoxicated patients’ objections and a common physician bias against these patients, they warrant rapid, meticulous evaluation and aggressive treatment when indicated.

Physicians must not assume that intoxication is the etiology of a patient’s altered mental status. There is little debate about the management of the patient with a severely altered level of consciousness or in a comatose state. Attention to the ABCs (i.e., airway, breathing, and circulation) is the first priority. If the airway is occluded, unprotected (i.e., no gag reflex), or there is poor respiratory effort, these patients must be intubated. When possible, other patients should be positioned in the left lateral decubitus position to prevent aspiration after clearance of the C-spine, if indicated. Understandably, positioning is difficult and often impossible in these patients. A full set of vital signs, including a core temperature, is essential. Thiamine 100 mg IV should be given to all patients as Wernicke’s encephalopathy is suspect in the malnourished alcoholic patient. Patients with pinpoint pupils or depressed respiration should receive 2 mg of naloxone, given in consideration of a possible
narcotic overdose. Ethanol intoxication classically dilates pupils. However, patients with very high ethanol levels (over 400 mg/dL) often may present with pinpoint pupils unresponsive to naloxone. An accucheck should be performed, as alcoholics are prone to develop hypoglycemia. Fifty mL (50 mL) of 50% glucose IV should be given if the blood sugar is low, a common state in alcoholics due to depletion of glycogen stores.

In comatose patients or those patients with severely altered mental status, blood alcohol level should be performed to determine if alcohol intoxication is the likely etiology of the altered mental status. The blood alcohol level should roughly correlate with the level of consciousness. Physicians must be aware that coma due to ethanol alone is rare at blood levels less than 300 mg/dL. \(^{11}\)

After a thorough history and physical examination, if the EP determines that there is no apparent traumatic or other injury, then a period of observation is reasonable. The emergency staff should agree upon a reasonable observation protocol and stick with it. This would include, at a minimum, repeat vital signs, check of the patient’s mental status, and neurologic checks. There is no widely accepted time interval for physician re-evaluation. This should be determined on a case-by-case basis.

In general, based on the biomechanics of alcohol degradation, the patient’s clinical condition should begin to improve in a three- to six-hour time frame. Some authors have recommended a longer time frame prior to physician re-evaluation. \(^{12}\) Whatever the time frame, further investigation is indicated if the patient’s mental status does not improve over a reasonable period of observation (i.e., the patient does not "come up" as expected); there is any deterioration in mental status; and/or there are new patient complaints as the patient approaches sobriety. Alcoholics are prone to trauma and coagulopathies, and the threshold for CT scanning should be low. \(^{13}\)

A history from family, friends, and paramedics is essential, and co-ingestions as well as recreational drug use should be suspected. Although ethanol is rapidly absorbed and poorly adsorbed by activated charcoal, the possibility of recent ingestion (within 1 hour) and co-ingestion make GI evacuation and the administration of activated charcoal a reasonable approach to the extremely intoxicated patient. \(^{14}\) EPs should be aware of the possible presence of cocaethylene, a toxic metabolite of cocaine and ethanol, which is more toxic than either drug alone and has been reported to be present in more than half of subjects who tested positive for cocaine in one study. \(^{15}\) Furthermore, chronic alcoholics may suffer from low magnesium and other electrolyte abnormalities, clotting disorders, hepatic encephalopathy, and untreated infections that warrant investigation, particularly in those whose mental status does not correlate with the blood alcohol level.

It is impossible to detect every traumatic injury, co-existing medical problem, or every co-ingestion in the initial evaluation of the intoxicated patient. The observation period is necessary to identify hidden or subtle problems. This is one area where physician/nursing teamwork is critical. The entire staff must recognized this as a high-risk situation. Staff may feel that managing the intoxicated patient is distasteful, but they must be convinced that it is not nearly as bad as malpractice litigation.
Drawing Alcohol Levels

Generally, when alcohol levels are indicated, the use of a breath-testing device rather than a blood sample is acceptable. Studies have shown breath analysis to be as accurate as blood, particularly when the level is over 100mg/dL. However, breath analysis does require a certain degree of ability on the part of both the patient and the technician. Patients must be able to follow directions and cooperate while intoxicated. Breath testing is limited to those patients who can cooperate. Breath testing can afford physicians an immediate level to work with; thus permitting rapid correlation of the level and clinical assessment. Waiting for a blood alcohol level may delay immediate treatment and aggressive management of underlying or co-existing problems. Therefore, use of breath analysis is a rapid and acceptable alternative to blood alcohol levels in a limited clinical setting. Those patients who are severely intoxicated or uncooperative prohibit breath testing; blood alcohol levels should be obtained when clinically indicated.

The frequent use of the breath analyzer, even if a blood alcohol level was previously obtained, offers the physician a convenient and rapid determination of alcohol level to determine if alcohol content is rising or falling. Although rising ethanol levels are uncommon, this may occur if the patient has a recent large ingestion of alcohol prior to the ED visit with ongoing gastric absorption, or if the patient is still drinking in the ED. These "re-checks" will assist in correlating alcohol level with clinical improvement.

The level obtained by breath analysis should be documented in the chart. If the breathalyzer is capable of printing, the printed number should be attached to the chart. If a printed copy is not available, then the physician or those delegated to administer the test should document the time and the level obtained.

Blood Alcohol Levels

It is not practical to draw a blood alcohol level on every patient who presents to the ED with suspected alcohol consumption. In patients simply suspected of consuming alcohol, a clinical assessment by history and physical exam with particular focus on mental status and neurologic exam is sufficient. A determination of alcohol level is not always necessary. It is acceptable to simply observe patients who are intoxicated and lack signs of trauma, focal neurologic deficit, or other problems for a period of observation, without an alcohol level. These patients require serial exams to establish clinical improvement of mental status over time. In this patient group, for clinical purposes, a numerical blood alcohol level has little use. If the patient does not deny alcohol intake, the patient’s clinical capacity is more important than the specific level of alcohol. A low blood alcohol level does not guarantee competence. Other variables may not have been measured, such as drugs ingested or abused by other routes of administration, hypoglycemia, acidosis, medical illness, blood loss, etc.

A determination of alcohol level is indicated if there is apparent intoxication and the patient is comatose, is in respiratory distress, has a severely altered mental status,
or an altered mental status with signs of trauma. In patients with signs of minor trauma alone, a determination of alcohol level should be based on the case history and physical exam, particularly the mental status and neurologic exam. In the patient who did not receive an initial level and then fails to clinically improve over time or whose condition deteriorates, an alcohol level is indicated.

Informed Consent, Refusal of Care, and AMA

In general, patients who present to the ED with a significant alteration in mental status are deemed incompetent to make medical decisions. Technically, only the legal system can declare incompetence. However, physicians are often placed in the difficult position of making rapid decisions about intoxicated patients refusing care, or attempting to leave the ED against medical advice (AMA). The EP must have special expertise in addressing this complex medical and social problem.

The alcohol impaired individual who refuses treatment is often not capable of understanding the risks, benefits, and alternatives of treatment; therefore, an informed decision cannot be made. An analysis of state legislation and case law strongly suggests that the EP may err well on the side of caution and restrain and treat when necessary. However, intoxication is not synonymous with incompetence. Therefore, the EP must make an individual determination, on a case by case basis, regarding the patient’s ability to provide informed consent or refusal. The EP should carefully document the presence of altered mental status and the need for application of restraint to protect the individual from harm. This will be protective in any subsequent action by a reviewing entity—whether that is a state Human Right’s Commission or a plaintiff in civil litigation.

Although this is a complex problem, there is clearly a duty to protect patients who cannot make an informed decision and may be a danger to themselves or others. From a legal standpoint, it is better to err on the side of paternalism. In some states, the EP may also have a legal duty to protect third parties, outside of the patient-physician relationship. (See ED Legal Letter 1995;6:95-102.) For example, if an intoxicated patient leaves the department and drives home in an automobile and injures a pedestrian en route, the third-party pedestrian may have a cause of action against the EP for negligent discharge of an intoxicated patient.

Some states have specifically legislated that there shall be no legal recourse against physicians for examining and treating a patient without his or her consent if the patient is intoxicated, under the influence of drugs, or otherwise incapable of providing informed consent. In Mississippi, the law defines who may consent to medical treatment. It excludes those of unsound mind, related to "natural state, age, shock, anxiety, illness, injury, drugs or sedation, intoxication, or other causes of whatever nature." In states without such statutes, case law supports the underlying philosophy that intoxicated patients are incapable of giving consent. In Miller v. Rhode Island Hospital, the Rhode Island Supreme Court held that a patient’s intoxication may render him incapable of giving informed consent and, in emergency situations,
that consent may be waived. In this case the plaintiff, Miller, had a blood alcohol level of 0.233 and was involved in a multiple vehicle accident. Due to the nature of the accident and the patient’s intoxication, the attending surgeon determined diagnostic peritoneal lavage was indicated. Over the patient’s objection, it was performed. In Blackman v. Rifkin, the Colorado court found that intoxication coupled with head trauma permits EPs to restrain a patient and imply consent necessary to treat his condition.

In the prehospital setting, some states have provided legislative protection from liability for emergency medical personnel and police in restraining intoxicated patients who are under the influence of drugs or alcohol. In Illinois, the Alcoholism and Other Drug Abuse Dependency Act provides that a person who appears unconscious or in immediate need of medical services while in a public place and shows symptoms of impairment brought on by alcoholism or other drug abuse may be taken into protective custody and brought to emergency medical service.

In summary, these cases and statutes demonstrate support physicians in treating intoxicated patients without their consent. Their documented inability to understand the risks, benefits, and alternatives of treatment creates a presumption of incompetence in regard to making medical decisions. Physicians who render reasonable care to intoxicated patients have historically been afforded protection from civil and criminal liability in providing necessary evaluation and treatment.

Discharge Recommendations

The medical, legal, and social issues related to discharge are complex. The EP has to consider the patient’s clinical condition and conduct following discharge; the patient’s support network of family or friends; community resources for follow-up care; the potential for injury to third parties exposed to the patient post discharge; and other issues. A few case examples are illustrative.

Patient # 1

This patient presented clinically intoxicated, with no other apparent clinical problem. The patient has been observed over a period of time, has ‘come up’ as expected, and wants to leave the hospital. The EP did not feel that an initial or follow-up alcohol level was necessary. On re-examination, the EP has documented a normal neurologic exam and normal mental status with decision making ability. This patient may be safely discharged from the hospital, after careful documentation of the re-examination. Optimally, the patient leaves the ED with a family member or friend, with an appointment with a family doctor or an alcohol treatment program.

Patient # 2

Similar presentation, but the EP decided to order an alcohol level. Whether this is a blood or breathalyzer sample, the thought process is the same. Legally, the decision to discharge should be based upon the patient’s clinical condition. When the patient has a normal neurologic and mental status examination, and is not a danger to self
or others, the patient may be discharged from the ED. However, in this scenario, the EP now has a documented alcohol level, and there may be a repeat level that remains above the states' legal limit of intoxication, or the physician may not have ordered a repeat level.

It is important to note that the state "legal limit" of intoxication is not a measure of patient competence. The legal limit for driving has very little to do with the capacity to make informed decisions. Intoxication is not used to indicate a level that increases the risk of injury while driving; but rather, a term used to describe a level that produces clinically identifiable impairment that may alter sensation, coordination, judgment, and insight.

Without clear documentation of neurologic status and mental status, judge or jury may deem discharge inappropriate based on popular perceptions of the "legal limit." If the patient is agreeable, we recommend holding the patient until the alcohol level is below the legal limit of intoxication. If the patient wants to leave, the EP must discharge when the patient has a normal examination, and can understand the risk of leaving. However, if the EP or staff are aware that the patient intends to get into an automobile, and therefore deems the patient a danger to himself or others, the EP should order patient restraint, or local law enforcement should be contacted.

To summarize, patients who show no evidence of concurrent significant illness or injury and are functionally sober can probably be safely discharged. These patients are not clinically intoxicated, and discharge is appropriate. For those patients who are to be discharged and have a documented blood alcohol level above the legal limit, extensive documentation of the patient’s clinical condition with focus on capacity needs to be done and special discharge arrangements must be made. In this situation, assuming subsequent patient injury and a lawsuit, the jury may rely on the numerical value rather than the physician’s assessment of ‘functional sobriety’ or clinical intoxication. Therefore, if a level is drawn, the potential for exposure to liability would be reduced if discharge is delayed until the blood alcohol is at or near the legal limit. Assist the jury, the fact finder, with excellent documentation prior to discharge.

Case Review

Case # 1

The patient was in his 20s when he suffered blunt head injury during an assault. He was found by police and taken to the defendant hospital’s ED. The plaintiff was uncooperative and initially refused treatment but eventually consented to an X-ray of the skull. The X-ray was read as normal by the EP. The patient was released to the custody of the sheriff’s department, AMA.

The defendant physician claimed that the patient was legally intoxicated, but was lucid enough to make an AMA decision. The radiologist read the x-ray later that day and noted a markedly depressed left parietal skull fracture. The plaintiff was taken from jail to a hospital, monitored for several hours, and then taken to surgery, where
the depressed fracture fragments were elevated. The plaintiff suffered a brain injury from the fracture and suffers cognitive deficits that "prohibit gainful employment."

The plaintiff claimed that the EP failed to recognize the skull fracture and improperly released him while he was intoxicated and that the delay in treating the fracture contributed to approximately half of his neurological deficits. The defendants contended that, although the fracture was present, it was not "medical negligence" to miss it. Further, any injuries to the plaintiff were caused by the blow itself and the delay in treatment was inconsequential.

According to reports, a $200,000 settlement was reached with the EP paying the entire amount.23

This injury was probably caused by the blow itself, and any delay in treatment was inconsequential. Therefore, this case should have failed on the causation issue. Causation is one of the essential elements of a medical malpractice action. The plaintiff must prove that a breach in a standard of care caused the patient's injury. If the injury occurred unrelated to a breach in a standard of care, as in this case, then an essential element of the action is missing, and the lawsuit should fail. Based on the medical facts, this case should have failed. However, the discharge of an intoxicated patient with a skull fracture is somewhat inflammatory, and the defense team may have been hesitant to bring this case before a jury. Therefore, the case never made it to the jury, it was settled prior to arguments over the causation issue.

A review of recent AMA cases indicates that the AMA defense is an extremely strong defense when used in the appropriate circumstances. (See ED Legal Letter 1996;7.) If a patient has a normal mental status, and makes an informed refusal of care, then the AMA defense wins in almost every case. Although these issues must go to a jury, the jury tends to support the emergency physician. However, if there is a question about the individual's ability to provide an informed refusal and, thus, an informed AMA, the juries are not nearly as lenient. In this case, the physician admitted that the patient was intoxicated, but noted that the patient was able to give a legitimate AMA.

Judge and jury often think of intoxication as anything over the local legal limit for intoxication. The legal limit is typically used for driving under the influence cases, and should have no bearing on our medical management of the intoxicated patient. However, in fact, judge and jury often use this level as a threshold level for decision making, even in recent years, the "legal limit" has become a moving target. The legislative limits of intoxication have been reduced in several states in the last several years. Regardless, if the patient's level is above the legal limit, they often conclude that the patient cannot make an informed decision. Certainly, the plaintiff's attorney reinforces that point.

As EPs, we know that some of our "regulars" can walk into the ED and have a normal mental status with a blood alcohol level well over the legal limit of intoxication. In these cases, it is appropriate to discharge a patient having documented a normal mental status through a mental status examination, and
document that the patient understands the risks of leaving the ED (i.e., an informed refusal). If there is no documented serum alcohol level, then the judge and jury must rely upon your clinical assessments, which is appropriate. If you’ve ordered a blood or serum alcohol test, judge and jury may be swayed by the level and not on your clinical judgment.

Case # 2

The patient was a 21-year-old male who was involved in a car accident. He was thrown 20 feet. The patient was intoxicated when he was taken to the ED of Oconee Memorial Hospital by paramedics. The paramedics recorded that the plaintiff had good movement in his extremities.

The ED physician, Dr. N (a general surgeon), removed the cervical collar and other immobilizing devices in order to take X-rays. The physician took the plaintiff’s arm and holding the back of the plaintiff’s neck lifted him into a sitting position. The patient yelled out that his neck was in pain. He subsequently became quadriplegic.

The plaintiff contended the following: the defendant had mistreated patients who are intoxicated, that the defendant regularly removed cervical collars from emergency room patients, that the defendant improperly lifted the plaintiff into a sitting position; and the patient’s paralysis resulted from the treatment received in the ED.

The defendant contended that the plaintiff was injured in the automobile accident and there was no relationship between the ED treatment and the plaintiff’s injuries.

The jury returned a $5 million award for the plaintiff.24

The alcohol-impaired patient may have a serious traumatic injury with no complaint of pain. The EP should assume that the intoxicated patient brought in from the scene of an accident has suffered traumatic injury until proven otherwise. Palpating the cervical spine, and asking the patient if he has pain is not a good screen for cervical-spine injury in the intoxicated patient. A review of alcohol related lawsuits suggests that, at times, the EPs feelings about the intoxicated patient get in the way of clinical decision making. The EP must recognize that the intoxicated patient is in a high-risk group for serious injury and make these patients a priority.

Case # 3

The patient presented to the ED of the McGuire Veterans Administration Medical Center requiring assistance to walk and under the influence of alcohol. He complained of tingling in his arms and weakness in his legs. He also complained of severe pain in his neck and shoulders. He was initially combative and verbally abusive, but calmed down later. The patient cooperated with the medical examination in the ED by allowing his blood to be taken and his upper motor strength to be tested.
When asked to move his legs, however, he indicated that they were sluggish to move. The patient had a history of a cervical-spine injury 16 years earlier in a helicopter crash. The diagnosis was possible cervical-spine injury, but the physician felt that a repeat exam would be necessary when the plaintiff was sober.

The patient/plaintiff claimed that no cervical MRI or X-ray studies were performed for sixteen hours. The MRI studies revealed an acute herniated disc at the C6-7 level causing his neurologic symptoms. The plaintiff claimed that surgery was performed nineteen hours after admission, which resulted in his becoming a C-7 quadriplegic.

According to accounts, a settlement with a present cash value of $1 million was reached.25

Once again, the EP must aggressively work-up all potential life or limb threats in the patient ‘under the influence.’

The inebriated patient who has blunt head trauma is an intracranial bleed until proven otherwise. The inebriated patient with neck pain is an unstable cervical fracture until proven otherwise. This patient should have been completely immobilized and a hard collar and backboard applied pending further diagnostic evaluation.

If the physician felt the need to repeat the exam prior to radiographic evaluation, complete immobilization in the interim may have avoided this lawsuit. The plaintiff would claim that movement during the 16-hour delay caused or aggravated the injury. Optimally, this patient would have been sent immediately for CT. If the physician felt strongly that repeat exam was indicated, further testing should not have been delayed beyond the suggested 3-6 hours. If, for any, reason the diagnostic evaluation had to be delayed, complete immobilization or transfer to a facility that could carry out the evaluation was indicated.

Case # 4

The patient was a 16-year-old boy who was taken to the defendant Emergency Care Center after his friends found him abandoned in a parking lot. He was disoriented, lethargic, semi-comatose, and unresponsive, except to painful stimuli. His blood alcohol level was 53 mg/dL. The patient exhibited poor verbal skills, sluggish pupils, contusions on the back of his skull, upper back abrasions, and an inability to communicate rationally.

The defendant EP examined the patient at midnight. The primary diagnosis was alcohol abuse with possible head injuries. The emergency staff checked on the patient periodically through the night. The patient’s condition deteriorated between 5:00 and 6:00 a.m. and he was transferred to another Medical Center. In route, the patient died as a result of a massive intracranial epidural bleed.

The plaintiff claimed that the defendant should have immediately transferred the decedent to the medical center for a CT scan for further evaluation since it was not
available at the emergency clinic. The defendants contended that the decedent had been treated appropriately given his conditions and symptoms. They also maintained that immediate transfer of a patient in the decedent’s condition for a CT scan was not within the standard of care.26

The jury returned a verdict for the defendants.

This was a gift. It appears there was a delay in diagnostic evaluation. However, remember that the jury is asked to measure the physicians conduct not against the highest quality practitioner, but against the reasonably trained practitioner. Here, the jury believed that it was reasonable to observe rather than aggressively evaluate.

Although this was a defense verdict, the case demonstrates a critical element regarding management of this patient group. The alcohol level of 53 mL does not explain the long list of neurologic signs and symptoms. Alcohol levels in this range may begin to cause problems with judgment, but would not cause obvious neurologic changes. If the alcohol level is not consistent with the patient’s presentation, the EP must dismiss alcohol as the cause and aggressively pursue the diagnostic evaluation.

Case # 5

The patient was a 23-year-old man named Shawn Davis. He was a laborer. Mr. Davis went to a concert, and had been drinking beer. Leaving the concert, the patient was struck by an automobile and knocked to the ground. He was taken to an ED, where the defendant emergency physician, Dr. W, examined him and noted that he was unsteady on his feet. Dr. W. did not obtain a blood alcohol level, nor did he pursue any other diagnostic evaluation. Mr. Davis was sent home with head injury instructions.

Several hours after arriving home, Mr. Davis aspirated and was revived by his parents. An X-ray revealed a skull fracture with a subdural hematoma. The plaintiff underwent an emergency craniotomy and evacuation of the hematoma. As a result of the delay, Mr. Davis is blind in one eye, and has a loss of peripheral vision in the other eye.

The plaintiff alleged that the defendant was negligent in attributing his symptoms to alcohol and in failing to diagnose the skull fracture and subdural hematoma. The defendant contended that he conformed to the standard of care in sending the plaintiff home with head injury instructions. The parties reached a structured settlement of $120,000 cash plus $1000 a month for life.27

As you can see, this is a commonly recurring theme in alcohol-related emergency malpractice lawsuits. Intracranial injuries get missed in intoxicated patients who present to the ED. The EP documented that the patient was not steady on his feet. Unless proven otherwise, this represents a focal neurologic deficit. This
case required more aggressive management, probably CT, and continuing observation until the patient was no longer intoxicated.

Case # 6

The patient had consumed several beers and some whiskey at the apartment of a woman, not his wife, over the course of an hour. Shortly after he left, the woman heard "a little boom, boom sound." She saw the man lying face down on the cement patio at the bottom of a flight of stairs leading up to her apartment. She helped him up, placed a pillow under his head and told him to sleep it off. The woman’s daughter discovered the man when she returned home several hours later. She told the man to leave. In response he said that he "couldn't move" or did not want to move because of pain in his arm and neck and numbness in his neck.

An ambulance was called and EMTs responded within minutes. Although the man smelled of alcohol and appeared intoxicated, he was coherent and answered questions. The EMTs apparently checked only his blood pressure and checked his pupils by shining a flashlight into his eyes. They urged him to go to a hospital.

When he continued to refuse and the woman and the daughter continued to insist that he leave the stairs a police officer called a police van and he was taken to a detoxification center. The officers found that he was "dead weight" so they carried him by his arms and belt to the vehicle and placed him face down on the floor. A doctor at the detoxification center immediately recognized signs of spinal injury and had him transported to a hospital.

The patient went into cardiac arrest upon arrival, subsequently became comatose, and died two days later. His treating physician concluded that the cause of death was a fractured neck with spinal cord contusion and that the fracture took place at the initial impact. The plaintiff’s expert faulted the EMTs for failing to recognize the broken neck and failing to immobilize the patient.

The jury returned a verdict in favor of the plaintiff for $676,548.  

The prehospital setting further complicates the management of this difficult group of patients. Pre-hospital providers must maintain a low threshold for suspecting serious trauma in alcohol impaired patients. This was an intoxicated individual, complaining of pain in his neck. The EMTs should have recognized and acted upon the high risk of cervical injury.

An EP taking "medical control" by radio communication could have authorized restraint, immobilization, and transfer to the hospital. The ED must work in close cooperation with prehospital providers in order to provide optimal patient care.

Summary

The alcohol-impaired patient represents a high risk to the EP. These patients will sometimes have occult traumatic injury, co-existing medical problems, or co-
Ingestions or other toxic substances. However, in many cases, there are no apparent problems, other than intoxication, and a period of observation is reasonable. The EP and nursing staff must maintain a high index of suspicion during the observation period.

An error on the side of missing a diagnosis in an alcohol-impaired patient may be devastating in terms of patient death or disability, with the possibility of resulting litigation. State legislatures and courts have supported continuing patient management and erring on the side of restraint. The legal downside of this course of action would be a suit related to assault, battery, or false imprisonment, or perhaps an administrative action brought by a state Human Rights Commission or other similar entity. In general, the EP will fare far better in these latter actions, asserting his dedication and concern for the patient’s well-being.

Documentation is key. The EP should carefully document examination, re-examination and condition on discharge. When the patient is permitted to leave the ED, the EP must provide clear documentation of clinical capacity prior to discharge. Discharged patients should always have arrangements for support and follow-up and should be offered the option of substance detoxification.

References


2. Id at 817.


12. May H, et al. Emergency Medicine. 2nd ed. Little, Brown & Co; 1992:1747. May suggests another etiology should be sought if there is no clinical improvement after six hours of observation. In a study done at Detroit Receiving Hospital in order to distinguish patients with uncomplicated ethanol intoxication from intoxicated patients with other causes of mental status depression found an average of 3.2 (+ or -3.6) hours to normalize mental status scores in those with uncomplicated ethanol intoxication. While the authors recommend searching for another cause of altered mental status after three hours, they noted considerable individual variation in the duration of mental status depression caused by uncomplicated ethanol intoxication (21% took seven or more hours to normalize and 4% took as long as 11 hours). Prospective Analysis of Mental Status Progression in Ethanol-Intoxicated Patients. Todd K, et al. Am J Emerg Med 1992;10:271-273; Another study by Galbraith reported that 16% of patients with traumatic intracranial hematomas had recognition of their head injuries delayed more than 12 hours due to ethanol ingestion, and that 45% of those dying from undiagnosed head trauma had been intoxicated. Galbraith S: Misdiagnosis and Delayed Diagnosis in Traumatic Intracranial Hematomas. BMJ 1976: 1:1438-1439.


