



Who we are...

Since 1989, Med League Support Services, Inc. has aided attorneys in 38 states. We perform these services:

- Analyze medical records
- Develop case chronologies
- Screen malpractice cases for merit
- Prepare PowerPoint presentations for settlement negotiations or trial
- Locate nursing & physician experts
- Prepare medical summaries
- Transcribe handwriting
- Prepare life care plans
- Prepare demonstrative evidence
- Prepare medical illustrations
- Assist with preparation of demand letters and settlement brochures

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Anticoagulants: A Double Edged Sword

Anticoagulants are life-saving drugs used to prevent both arterial and venous clots. Arterial clots are the most common cause of myocardial infarction, stroke, and limb gangrene. Venous clots, which typically arise in legs, may travel to the lungs to create a pulmonary embolism which shuts off circulation to part of the lung, and may cause death. ¹ Anticoagulants are used to prevent these events, and are commonly given to patients with atrial fibrillation (irregular heart beat), mechanical heart valves, after hip surgery, and for a score of other reasons. Anticoagulants do not have the capacity to break up existing clots- their focus is on prevention.

These medications can save lives, but also kill. They are singled out as high-risk medications by several patient safety organizations: The Institute for Safe Medication Practices, the Institute of Healthcare Improvement, the Joint Commission, and the US Pharmacopeia. High risk drugs, including Heparin, are involved in more than 31 percent of all medication errors that cause harm to patients. They carry a heightened risk of causing significant harm to patients when administered incorrectly or in error. Sixty percent of life-threatening or lethal errors involve intravenous

drugs such as Heparin. ²

Anticoagulants can be implicated in a variety of personal injury and medical malpractice claims. Consider these scenarios.

- Medication errors may occur during administration of anticoagulants, such as the error that recently affected the newborn twins of actor Dennis Quaid. The newborns received 10,000 units of

Heparin instead of 10 units at a California hospital. The Quaid's sued the manufacturer of the drug because the packaging of the 10 unit per cc vial of Heparin looked almost exactly like the 10,000 units per cc vial. ³

- Anticoagulants can turn a bump on the head into a tragedy. This is a common fact pattern. An elderly man who was taking Coumadin, an oral anticoagulant that

slows clotting time, fell on the ice and hit his head. Bleeding began within his brain, causing death. The patient's attorney filed a personal injury claim.

- Intramuscular injections given to a person on Heparin may cause extensive damage. In one case, physicians ordered a variety of medications to be given by intramuscular injections to a patient who was receiving Heparin. When the patient's clotting time rose above the therapeutic values, the injections caused the development of a hematoma- collection of blood in her right buttock. This in turn pressed on the sciatic nerve, causing a foot drop. The patient's son, who was a medical malpractice attorney, filed a



claim and settled the case.

- The clotting time of a woman rose while she was on Heparin. When her hemoglobin began to drop, indicating she was bleeding, the physician delayed ordering blood transfusions. The patient died from blood loss. A wrongful death suit was filed.

What makes anticoagulants so dangerous? First, there is a narrow therapeutic window of safety in the use of these medications. The primary action of anticoagulants, to increase bleeding time, can lead to hemorrhage at any site in the body. There are multiple food and drug interactions with anticoagulants, making the response to these drugs unpredictable. Frequent monitoring of clotting time is necessary, requiring painful and frequent blood tests. Even when this monitoring occurs, the level of anticoagulation is outside the therapeutic range almost half of the time. The risk of major bleeding with long-term treatment increases in the elderly - the population most in need of Coumadin for treatment of atrial fibrillation. These risks dissuade many prescribers from using Coumadin. It is estimated that Coumadin is not given to almost half of the atrial fibrillation patients.⁴

Given all of the dangers associated with these high-risk drugs, anticoagulants are a primary focus of patient safety efforts. A few days after the news of the massive overdoses received by the Quaid twins, Baxter announced it had designed a new enhanced label that featured an increase of 20% font size, a unique color combination, and a large red cautionary tear off label.⁵ As part of the 5 Million Lives Campaign of the The Institute for Healthcare Improvement (IHI), a goal has been set to reduce harm 50% from high-alert medications by December 2008. IHI directs attention to the high risk aspects of these medications through seminars and extensive information on their website, www.ihl.org.

The Joint Commission (formerly the Joint Commission on Accreditation of Healthcare Organizations or JCAHO), which accredits most hospitals and a vast variety of other healthcare organizations, has identified a 2008 National Patient Safety Goal related to anticoagulants: "Reduce the likelihood of patient harm associated with the use of anticoagulant therapy." There is a one year phase-in program with specific milestones set at 3, 6, and 9 months with the expectation that hospitals will fully implement this goal by January 2009. The implementation process addresses several key components of medical, pharmaceutical, and nursing practice. These include use of approved protocols for ordering and monitoring

anticoagulant use, notifying the dietary department of the fact the patient is on Coumadin, using programmable infusion pumps and premixed infusions of Heparin, monitoring bleeding time with INR (international normalized ratio) levels, and education of staff, patients, prescribers, and families, among others.⁶ This goal affects all Joint Commission-accredited hospitals.

Analysis of Medical Records

Med League assists attorneys evaluating cases involving anticoagulant therapy by considering the answers to these top ten questions and others applicable to the case:

1. Was the patient an appropriate candidate for anticoagulation?
2. Did the patient comply with outpatient blood tests needed to monitor response to the anticoagulants?
3. Were standardized protocols used to order anticoagulation?
4. How often were clotting times tested?
5. Were abnormally elevated clotting times acted upon with dosage adjustments?
6. Were there any signs of bleeding while the patient was on anticoagulation?
7. How quickly did the healthcare team respond to bleeding?
8. Did the nurses give Heparin or Coumadin as ordered?
9. Is there evidence that hemorrhage was the cause of the patient's death, or was some other cause more likely?
10. What type of medical expert is most appropriate to review the case?

Demonstrative Evidence

Med League helps to identify and prepare the types of demonstrative evidence most useful to identify the details of the case. For example, in the case involving the hematoma that developed from multiple intramuscular injections, we did a timeline of key events in the days leading up to the hematoma diagnosis, a chart showing all of the injections given in each buttock, and several line graphs correlating the clotting times, medications, and the injections given each day. Demonstrative evidence is individualized to the details and themes of the case. Call us to discuss your needs.

References are found on our website at www.medleague.com/articles/index.html. This article was written by Pat Iyer MSN RN LNCC CLNI