

# THE LNC NEWSLETTER

PRESENTED BY:  
**Medical-Legal Interface**

## Rancho Los Amigos Cognitive Scale

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When dealing with TBIs there are three tests generally accepted in the medical field to assess cognition in these patients, those being the Ranchos Los Amigos Cognitive Scale, the Glasgow Coma Scale and the DRS or Disability Rating Scale. In this article I will be addressing the Ranchos Los Amigos Cognitive Scale which is a 10 level scale, with 1 being the lowest and 10 being the maximum.

### Levels of Cognitive Functioning

#### Level I - No Response: Total Assistance

- No response to voice, light, sound, touch or pain.

#### Level II - Generalized Response: Total Assistance

- Demonstrates generalized reflex response to painful stimuli.
- Responds are inconsistent and not specific to stimuli.

#### Level III - Localized Response: Total Assistance

Demonstrates withdrawal or vocalization to painful stimuli.

- Responds to strong light and sound. .
- Responds inconsistently to simple commands.

#### Level IV - Confused/Agitated: Maximal Assistance

- Alert, restless, or agitated
- Severely decreased ability to process.
- Performs motor activities but behavior is non-purposeful.
- Short attention span

#### Level V - Confused, Inappropriate Non-Agitated: Maximal Assistance

- Responses are non-purposeful and random.
- Not oriented to person, place or time.
- Gross attention to environment.
- Highly distractible.
- Requires frequent redirection.
- Difficulty learning new tasks.
- Agitated by external stimuli.
- Verbalizations are often inappropriate.

#### Level VI - Confused, Appropriate: Moderate Assistance

- Inconsistently oriented to person, time and place.
- Able to attend to highly familiar tasks in non-distracting environment for 30 minutes with moderate redirection.

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## Testicular Torsion

Gail Hendrickson, RN, CEN

Testicular torsion is a urological emergency that must be differentiated from other complaints of testicular pain because a delay in diagnosis can lead to the loss of a testicle. Testicular torsion involves a testicle that has rotated on the cord from which it is suspended. This cord contains the blood supply, and if it twists, it cuts off the blood flow, and causes the testicle to die. Only a live, healthy testes can produce sperm, so the loss of the testes, can lead to a decrease in male fertility.

Some men may be predisposed to testicular torsion as a result of inadequate connective tissue with the scrotum. It may also result from trauma and swelling of the testicle. It may also occur after strenuous exercise. Torsion is more common during infancy and at the beginning of puberty.

Signs and symptoms of a testicular torsion include sudden onset of pain in one testicle radiating into lower abdomen, scrotal swelling, nausea or vomiting and lightheadedness. The affected testicle is higher in the scrotal sac.

Frequently, the history and physical findings are not clear. The diagnosis can be a difficult one, and the physician's judgment is the key to making the diagnosis. Early consultation with an urologist can be very helpful. Early surgical exploration is the mainstay of treatment of testicular torsion. When the diagnosis is not clear, an ultrasound or radionuclide scan of the testes can

be helpful to evaluate the blood flow to the testes. However, time is of the essence, and if ultrasound or scans are not readily available, it may be appropriate to take the patient to surgery. If the condition is diagnosed quickly and immediately corrected, the testicle can be salvaged. After 6 hours of torsion, the likelihood that the testes will need to be removed increases. Many patients don't present to the emergency room for many hours after they begin to have pain, so time is limited.

A typical medical malpractice case might go like this: A 17-year-old male comes to the emergency room after having 3 hours of left scrotal pain, and left lower abdominal pain and vomiting. The MD sees him within 30 minutes. A urinalysis, complete blood count and electrolytes are done. All these lab tests come back within normal limits. It has taken about 2 hours for all these tests to be complete, and the first ER doctor has gone home, and turned his care over to another doctor. He tells him that his exam showed obvious discomfort in the lower abdomen, both testes are down and that there is a left inguinal hernia. The second physician is not comfortable discharging this patient without examining him, so he goes in to see this patient. His exams the patient and finds a hard scrotal mass separate from the testicle, tender to palpation. He concludes that the patient's tender scrotal mass must be an infection of the epididymis. He discharges him on tetracycline (antibiotic) and told to see his

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## Bed Rest and Tocolysis Therapy Treatment for Premature Labor; Are they effective? The Real Answer

Jan Aken RN IBCLC LNC

It is not rocket science that the plan of treatment for premature labor depends on the cause of the preterm labor. After the health care provider determines the cause of the preterm labor then the provider must consider the gestational age before beginning any treatment. The intensity of the treatment to delay delivery is inversely related to the expected neonatal morbidity and mortality. The cause that led to preterm labor may also be compromising the fetus, i.e. placental abruption, or oligohydramnios. And to, preterm labor that is associated with infection is more likely to result in perinatal morbidity. And folks remember the treatment for premature labor is not always benign.

Studies had suggested the provider has a 24-48 hour time frame of opportunity to prevent preterm births. With this thought in mind Home Uterine Activity Monitoring (HUAM) was established with the idea that by monitoring at risk women at home, one would be able to identify early uterine activity and thus began the tocolytic therapy and other treatment before the onset of overt preterm labor. The studies done suffered from the small sampling sizes and other errors in the methodology and statistical analysis. But also the HUAM treatment was way too expensive. ACOG (1996a -1998) does not recommend HUAM for either singleton or multiple pregnancies.

It has long been thought that bed rest prolonged premature delivery when preterm labor is suspected. However there is no evidence from properly conducted trials that bed rest offers any benefits for prevention of preterm labor. (1) Even with this evidence we know the health care provider will prescribe bed rest. But it has been shown that only after 3 days of bed rest muscles tone decreases, there is a loss of bone calcium and glucose intolerance develops. (2)

Another treatment prescribed is intravenous hydration. The thought was to hydrate the mother and thus decrease the uterine contractions. But bed rest and intravenous fluid therapy are traditional treatments that continue to be used today. And again there is no evidence that this strategy is effective (3). Intravenous therapy is not benign. Careful attention

must be made to the input and output of the patient. The nurse must remain vigilant to the possibility of pulmonary edema developing in the mother.

Now let's look at some drugs used to treat premature labor. Tocolysis refers to the pharmacological treatment of preterm contractions. In spite of advances in the pharmacological treatment tocolytic therapies have not made a significant impact in the preterm labor rate. Ninety percent of the women who present in the birth center and report uterine activity are not candidates for tocolytic therapy. There are a couple of reasons for this high number. One is because the women have advanced cervical dilatation and or two they present with ruptured membranes. Of course another group of women who would not be candidates for this therapy are women with complications of their pregnancy, i.e. preeclampsia, cardiac disease, and intra amniotic infections.

The Beta receptor agents include Terbutaline. So Terbutaline along with magnesium sulfate and prostaglandin inhibitors are considered a class of drugs used to stop labor. These drugs are potent drugs and require vigilant maternal and fetal assessment during the intravenous infusion. Any one of these tocolytic agents may place the mother at some risk.

I will start with the Betamimetic receptors first. There are two types of Betamimetic receptors normally found in the body. Betamimetics receptor agents work by stimulating beta-adrenergic receptors. It is the beta<sub>2</sub> receptors that cause smooth muscle relaxation of the uterus. The Beta<sub>1</sub> receptors increase actively in the heart liver, pancreases intestine and adipose tissue. It is the overlapping of these two types of beta receptors that may have some adverse maternal and fetal side effects. The adverse effects documented and observed in the mother may include tachycardia, hypertension, shortness of breath and vomiting along with diarrhea. Adverse responses seen in the fetus include tachycardia and arrhythmia. But there is also this strange phenomenon that has been reported. A thickening of the intraventricular septum has been observed after prolonged exposure to tocolytic agents but the good news is the thickening does resolve over time. (4)

Another tocolytic drug that has been around for a very long time and one of the most widely used tocolytic agent is magnesium sulfate (MgSo<sub>4</sub>). Magnesium is found in the body normally but when it is administered as a tocolytic agent it suppresses nerve transmission to the uterine smooth muscle. Pulmonary edema and cardiac arrest are the two big adverse responses to the drug that one does not want to see. Thankfully these they rarely occur.

And the last tocolytic agent that I want to discuss is Prostaglandin inhibitors. These inhibitors relax the smooth muscle of the uterus. Indomethacin, an NSAID is a prostaglandin inhibitor. We know that prostaglandin acts on the uterine muscle by improving the coordination of the uterine contractions and is used in the induction of labor. Indomethacin works by retarding the contractions. An adverse reaction and side effect of this drug is that necrotizing enterocolitis (NEC) has been associated with Indomethacin exposure. (5)

In 1997 and 1998 the FDA issued warnings to health care providers about the potent risk of using Terbutaline pumps (Beta receptor drug) in the prevention of premature birth, citing one related maternal death and lack of evidence for clinical efficacy. ACOG stated in 1995 the available data does not support the role of tocolytic agents in reducing the incidents of preterm labor and births. So why do we still administer these very potent drugs with their numerous side effects? We want to think that tocolytic agents and bed rest are effective 48 hour stop gap measure in premature labor. It is during this small window of time, we think is an opportunity to attempt antenatal interventions to reduce neonatal morbidity and mortality may be accomplished. They include, (a) transferring the mother and fetus to a tertiary center, (b) antibiotic prophylaxis of neonatal group  $\beta$  streptococcal infections and lastly (c) the antepartum administration of corticosteroids to the mother to reduce the risk of death, respiratory distress syndrome (RSD) and intraventricular

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## Rancho Los Amigos Cognitive Scale

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- Remote memory has more depth and detail than recent memory.
- Maximum assistance for new learning with little or no carry over.
- Unaware of impairments, disabilities and safety risks.
- Consistently follows simple directions.
- Verbal expressions are appropriate in highly familiar and structured situations.

### Level VII - Automatic, Appropriate: Minimal Assistance for Daily Living Skills

- Consistently oriented to person and place, within highly familiar environments. Moderate assistance for orientation to time.
- Able to attend to highly familiar tasks in a non-distraction environment for at least 30 minutes with minimal assist to complete tasks.
- Minimal supervision for new learning.
- Demonstrates carry over of new learning.
- Initiates and carries out steps to complete familiar personal and household routine but has shallow recall of what he/she has been doing.
- Able to monitor accuracy and completeness of each step in routine personal and household ADLs and modify plan with minimal assistance.
- Unable to think about consequences of a decision or action.
- Overestimates abilities.

### Level VIII - Purposeful, Appropriate: Stand-By Assistance

- Consistently oriented to person, place and time.
- Independently attends to and completes familiar tasks for 1 hour in distracting environments.
- Able to recall and integrate past and recent events.
- Initiates and carries out steps to complete familiar personal, household, community, work and leisure routines with stand-by assistance and can modify the plan when needed with minimal assistance.
- Overestimates or underestimates abilities.

### Level IX - Purposeful, Appropriate: Stand-By Assistance on Request

- Independently shifts back and forth between tasks and completes them accurately.

- Initiates and carries out steps to complete familiar personal, household, work and leisure tasks independently and unfamiliar personal, household, work and leisure tasks with assistance when requested.
- Aware of and acknowledges impairments and disabilities when they interfere with task completion and takes appropriate corrective action but requires stand-by assist to anticipate a problem before it occurs and take action to avoid it.
- Able to think about consequences of decisions or actions with assistance when requested.
- Accurately estimates abilities but requires stand-by assistance to adjust to task demands.

### Level X - Purposeful, Appropriate: Modified Independent

- Able to handle multiple tasks simultaneously in all environments but may require periodic breaks.
- Independently initiates and carries out steps to complete familiar and unfamiliar personal, household, community, work and leisure tasks but may require more than usual amount of time and/or compensatory strategies to complete them.
- Anticipates impact of impairments and disabilities on ability to complete daily living tasks and takes action to avoid problems before they occur but may require more than usual amount of time and/or compensatory strategies.
- Able to independently think about consequences of decisions or actions but may require more than usual amount of time and/or compensatory strategies to select the appropriate decision or action.
- Accurately estimates abilities and independently adjusts to task demands.

## Testicular Torsion

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primary care doctor in 1-2 days. He is instructed to return for fever or severe abdominal pain or fever occurs.

This patient goes home and continues to have pain, but doesn't seek further medical care until 2 days later. He goes to his primary care doctor who examines him and immediately refers him to a urologist. He is admitted to the hospital for emergency exploration of the scrotum. He is found to have a non-viable left testicle, and an orchiectomy (removal of the testes) is performed. The urologist does a right-sided orchiopexy to avoid the risk of torsion on the right side.

Two months later, this patient consults an attorney. He is concerned about his ability to have children in the future. This is likely a case where the plaintiff has the edge on liability. There is no indication in the chart that either emergency room physician considered torsion as a possible diagnosis. Torsion has got to be one of the diagnoses being considered when a patient has scrotal pain.

When my son was 10 years old, he had a torsion, which I almost missed. He was complaining of abdominal pain, and was lying around on the couch. I thought he was trying to get out of going to school, but gave in and let him stay home. He never mentioned to me that he was having testicular pain also. I finally asked him if I could examine him, and he let me. I noticed that his left testicle was not in his scrotal sac. I immediately took him to the ER and he was in surgery within one hour of arrival. As I waited for the surgeon to come talk to me after surgery, all I could think of is "What if he loses his testicle because of me?" It was not a good feeling. Luckily they were able to salvage his testicle, and he made a full recovery.

***HAPPY MEMORIAL DAY***

***HAVE A SAFE AND HAPPY MEMORIAL DAY TO ONE***

***AND ALL!***

## Discography In The Diagnosis Of Back Pain

Robert Morrison, RN BSN

Back pain. The phrase alone is enough to make most of us remember a particularly bad episode or event. While just about any medical problem can be labeled as “the most devastating thing I can hear” acute back injury or chronic back pain is certainly one of them. It is a problem that the occupational health provider hears all too often. Acute muscle or other soft tissue strains are, for the most part, usually self-limiting. That is, they resolve fairly quickly and without complications. When there is a disk injury or chronic degenerative disease, however, the course becomes more complicated and uncertain.

To start with, the physician has to determine exactly which disk is the source of the problem. It has been theorized to this writer that if you performed lumbar MRI on 100 people at random, 30-35 of them would show abnormal disk findings. Some may be symptomatic, others not. Unfortunately, with age comes mileage (as my grandmother used to say). As we stress our bodies over our lifetime our vertebral disks are also becoming more fragile and less forgiving. Thus, when the patient sees the physician complaining of back pain, initial physical exams and MRI may often show multiple disk abnormalities. The question is, which one (or more) is causing the symptoms.

While there are several ways to obtain images of the spinal disks, there are limitations to each. Plain film x-rays, CT scans, and MRI are the primary tools used today. In addition, discography is used by many physicians to visualize the suspected problematic disks, as well as help determine which disk is the source of the patient’s pain. There is not a single diagnostic test that is labeled a gold standard for diagnosing problem disks, and the physician should not depend on diagnostic testing alone when making a diagnosis. A thorough documentation of the patient’s history, a detailed physical exam, and a combination of diagnostic tests based on the assessment data is the best way to ensure accurate diagnosis and treatment planning.

In discography, a dye is injected into a spinal disk suspected of being the cause of a patient’s back pain. The dye then spreads through the disk and allows the damaged areas to be seen more easily

on x-ray. Advocates of this technique also state that when a pain-generating disk is injected, specific pain sensations are provoked. For this reason, many physicians will use discograms when a patient has multiple problem disks evident on MRI, to help determine which specific disk is causing the patient’s pain.

The accuracy of discography is debated widely. As early as the late 1960’s studies were published which showed false-positive rates as high as 30-40%. Subsequent studies have also explored the accuracy of discography. Their findings vary considerably, and some studies have shown different false reading rates in patients with specific non-related problems such as psychological diagnoses, and also differences in accuracy in patients with chronic pain states vs those without chronic symptoms. The specific technique used during the test also affects the outcome, and the appropriate technique will vary according to the specific vertebral level.

There are other problems with provocative discography. The most notable may be the incidence of damage to the disk, a false-positive or false-negative finding, and the leakage of dye back through the injection pathway. At best, these can be painful for the patient, at a time when they are already in pain due to the original problem. At worst, they can cause a physician to treat the wrong disk, or not treat a disk that does need intervention. It goes without saying that the physician wants to cure the existing problem without adding to the patient’s symptoms in the process. This isn’t always possible, but you need to make sure that you don’t add to their problems through inappropriate actions.

A thorough evaluation of the discogram’s accuracy is beyond the scope of this article. However, it must be considered by the attending physician, case managers, attorneys, LNC’s or others who are reviewing a case, or determining the best course of treatment for a patient. For that reason alone, there should be thorough assessment data to accompany the discogram in order to arrive at the most accurate conclusion.

In summary, discography remains a widely used tool in the diagnosis of back pain and its treatment. When properly

performed, scientific studies have validated it as a diagnostic tool. It must, however, be included as part of the total diagnostic approach. Other studies have concluded that discography is uncertain at best, and not scientifically valid. As always, the best approach is to utilize multiple diagnostic and evaluation techniques, accompanied by a thorough medical history and physical exam. (References available.)

## Bed Rest and Tocolysis Therapy Treatment for Premature Labor; Are they effective? The Real Answer

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intraventricular hemorrhage in the preterm neonate. In the end, there are no known treatments that are wholly effective in eliminating the morbidity and mortality due to prematurity. So we must focus our attention on prevention and decreasing these risks in the pregnant population. The risk factors were discussed in the last issue of the *LNC Newsletter*.

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## Anticoagulation Therapy

Jeannine Lurie RN, BSN, CLNC

Anticoagulation is a term which means "reducing the blood's potential to clot". Many people interchange the expression "thinning of the blood" with the term "anticoagulation". Anticoagulants are drugs used to prevent and treat abnormal blood clotting. Anticoagulants are sometimes called "blood thinners", but this name is misleading. These drugs do not "thin the blood"—they make your blood less likely to clot. The role of "blood thinners" rests solely with their unique ability to reduce clotting of the blood, and thus reduce the risk of certain conditions which arise from abnormal clot formation. Blood is meant to flow continuously, bringing vital nutrients and oxygen to every cell of the body and should clot only when there is some injury to the blood vessel wall. This is a natural mechanism which prevents potentially fatal bleeding. If blood did not clot when a blood vessel was injured, even minor injuries could cause a person to bleed to death. Thus nature's defense is the natural clotting action of the blood. Blood will clot within minutes if the proper conditions are present. However, in some disease states, clotting occurs when it shouldn't and blood clots that form in an abnormal time or location can be dangerous. These clots can break loose from their attachment and migrate into other body organs, causing damage. Large clots can obstruct blood flow. To treat patients with clotting disorders, anti-clotting (or more appropriately "anticoagulant") medications are prescribed.

Warfarin, also known by the trade name of Coumadin, is the most widely used oral anticoagulant (and one of the most commonly prescribed medications) in the Western World. Coumadin does only one thing - it reduces the tendency of the blood to clot. There are millions of patients worldwide safely taking Coumadin. However, the unique action and metabolism of this drug requires careful dosing, administration and follow-up. Coumadin is based on a chemical known as warfarin sodium. Warfarin causes its anti-clotting effect by impairing the production of certain blood clotting proteins by the liver. These proteins, called "cofactors" are necessary elements of a complex series of proteins which the body uses to form a solid clot.

The proteins are the fundamental components of the "intrinsic pathway" of clotting, in which many other proteins participate in concert. The specific action of warfarin is to block the production of Factors VII, IX, X, and II by the liver. Creation of these factors by the liver is normally controlled by Vitamin K. This dietary vitamin is ingested with many different green vegetables. In addition, vitamin K can be produced by bacteria in the large intestine. As it is absorbed from the intestinal tract, Vitamin K is absorbed by, and stored in, the liver. Subsequently vitamin K is used in a vital regulatory step during the production of clotting Factors VII, IX, X, and II by the liver. Warfarin sodium blocks the action of vitamin K within the liver. Warfarin effectively competes for the same absorption sites within the liver needed for vitamin K uptake; thus the levels of vitamin K within the liver decrease. Reduced amounts of clotting factors VII, IX, X, and II are produced, and the clotting action of the blood is progressively impaired. All of the actions of Coumadin are due to the drug's inhibition of vitamin K. Administration of vitamin K can reverse the effects of Coumadin. In fact, clinical overdose with Coumadin is corrected with vitamin K. Dietary intake of vitamin K does affect the metabolism of Coumadin. This is one of the reasons that each patient seems to require a different dose of the drug to reach the target anticoagulation effect. Each person has different dietary intake of vitamin K, and also different liver function, different excretion of the drug, etc. Thus it is important for the physician to have a monitor of the Coumadin effect on the patient's clotting mechanism. Without a monitor, patients would frequently be overdosed or underdosed, with potentially hazardous consequences.

Monitoring of the Coumadin effect is performed with a blood test known as the Prothrombin Time or PT (also called Pro time). In recent years, the PT has been supplanted by the INR, or International Normalized Ratio. The INR is a more accurate way to calibrate the results of a prothrombin time test. The PT is the specific and only lab test used to measure the effectiveness of coumadin type anticoagulant drugs, such as warfarin

sodium (Coumadin). The PT is reported as time in seconds; represents how long a plasma sample takes to clot after a mixture of thromboplastin and calcium are added. If the patient's blood has less prothrombin than the normal control, or a decrease in other clotting factors that affect the prothrombin time, the PT time in seconds will be longer than the control values.

Oral anticoagulants have a narrow therapeutic range and the response to a standard dose varies widely both between patients and within patients over time. Changes in patient health, lifestyle or diet can effect changes in the action of the medication. Therefore, patients undergoing oral anticoagulant therapy must have their level of anticoagulation monitored frequently, with dosage adjustment as needed to ensure maximum safety and efficacy. When therapy with Coumadin is begun, the dose is guided by monitoring the prothrombin time. Therapeutic levels are generally between 1 1/2 and 2 times normal, depending on the patient's need for anticoagulation. Expressed in terms of the INR, the range is between 2.0 and 3.0. A usual dose requirement is between 5 to 7.5 mg. daily. In some patients with Coumadin resistance, the dosage may be much higher. If a patient with a prolonged PT must have surgery, it is important that the PT be brought within a normal range before surgery. This is often done with Vitamin K injections. Whole blood or fresh frozen plasma should be available for the surgical patient with an abnormal PT.

To give PT values a consistent basis of comparison from laboratory to laboratory, the World Health Organization instituted the INR, a uniform value in which PT is expressed as a ratio. In the last few years, the INR is becoming a more common method of measuring and reporting the PT. Targets for the INR vary, depending on the reason for anticoagulation. For example, a patient having hip surgery who is being anticoagulated to prevent deep vein thrombosis may have a target INR of between 2 and 3. To prevent arterial thrombosis in a patient with an artificial heart valve, the INR therapeutic goal may be in the 2.5 to 3.5 range. If the dose is too low, the risk of unwanted clot formation increases. (Next month, we will look at how coumadin is used in treatment of patients.)

## Does the Physicians Desk Reference (PDR) Set the Standard of Care?

Marguerite Barbacci, RNC, MPH, BSN, LNCC

The *Physicians Desk Reference (PDR)*, published by Medical Economics, is a compilation of manufacturer package inserts and drug labels approved by the Food and Drug Administration. Each full-length entry in the PDR is an exact copy of the product's government-approved labeling.

The *PDR* is not a scientific nor peer reviewed journal. Rather, it serves as an advertising vehicle for pharmaceutical companies and can be described as "the largest and longest running advertising publication in the field of medicine." Historically, the *PDR* was given to physicians free of charge by the pharmaceutical companies. The book was not available on the open market and could only be obtained through a physician. Over time, the *PDR* was viewed as a reference book, in part because it was cheaper to purchase than frequently updated pharmaceutical texts such as *Facts and Comparisons* or the *US Pharmacopeia*.

Each insert into the *PDR* is written by the drug manufacturer that makes the drug. The pharmaceutical companies pay to advertise their products in the *PDR*, typically focusing on new (and typically) expensive drugs. This is one reason why many older and/or rarely used drugs have brief entries (or none at all).

The content of all entries in the *PDR* is prescribed by federal law. The Code of Federal Regulations specifies the content that must be included in a prescription drug package insert or label. Section 201.56 delineates the general "section headings" for an insert or label.

That section of the CFR outlines standard information that a product label must include, including sections addressing Contraindications, Warnings and Adverse Reactions. (See 21 CFR 201.56)

Section 201.57 of the CFR addresses specific information to be delineated for drugs which have "special problems, particularly those that may lead to death or serious injury," the "black box warnings." In part, this section of the CFR states as follows:

"Special problems, particularly those that may lead to death or serious injury, may be required by the Food and Drug Administration to be placed in a prominently displayed box. The boxed warning ordinarily shall be based on clinical data, but serious animal toxicity may also be the basis of a boxed warning in the absence of clinical data. If a boxed warning is required, its location will be specified by the Food and Drug Administration. 21 CFR 201.57(e).

### Standard of Care?

Does the *PDR* set the standard of care? There seems to be no definitive answer to this question. Rather, the answer to this question depends on the state addressing the question. States which uphold customary practice doctrine define the standard of care as what is usually done (not just done in that state, but usually done). Other states are reasonable physician states, where the standard is what a reasonable physician would do under same or similar circumstances.

A google search for "PDR Standard of Care" provided the following citation:

[http://www.law.cornell.edu/ny/ctap/T99\\_0168.htm](http://www.law.cornell.edu/ny/ctap/T99_0168.htm)

In *Spensieri v Lasky*, the New York court "rejected on hearsay grounds plaintiff's attempt to introduce the *Physician's Desk Reference (PDR)* into evidence to establish by itself the standard of care for a doctor in prescribing and monitoring a drug...the *PDR* as offered here constitutes hearsay and cannot, by itself, establish the applicable standard of care for physicians who prescribe medications for their patients." [99 NY Int. 0168]

Although the New York court never determined whether the *PDR* is evidence of a physician's standard of care, other courts have approved the use of the *PDR* for this purpose. Some have characterized this information as prima facie evidence of a standard of care (*Ohligschlager v Proctor Community Hosp.*, 55 Ill 2d 411, 303 NE2d 392; *Mulder v Parke Davis & Co.*, 288 Minn 332, 181 NW2d 882). Other courts allow the statements contained in the *PDR* only as some evidence that the fact finder may consider along with expert testimony on the standard of care (*Morlino v Med. Ctr. of Ocean County*, 152 NJ 563, 706 A2d 721; *Craft v Peebles*, 78 Haw 287, 893 P2d 138; *Ramon v Farr*, 770 P2d 131 [Utah]).

Regardless of the setting, the *PDR* is a generally available book that provides drug information. The *PDR* is a book that most people have heard about. And if it says something about adverse consequences or maximum levels, it is usually based on other literature published in peer reviewed journals.

Medical-Legal Interface

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