serious signs of envenomation responded to calcium administration. Several retrospective studies showed an inconsistent response to calcium as well.[3,4] Pain relief with calcium was often transient, requiring repeated injections as was described in 1 of Zukowski's 2 patients.

Specific antivenin has been consistently shown to provide rapid and lasting relief of symptoms. Most patients respond dramatically to a single 2.5-mL vial. Antivenin is used much more liberally in other parts of the world where early use of antivenin has been shown to reduce considerably the length of hospitalization and prevent the development of lingering neurologic dysfunction seen in some patients not treated with antivenin.[5,6] The risk of immediate hypersensitivity reaction from the horse-serum–derived antivenin can be reduced by sensitivity testing before administration. A serum sickness reaction might occur but is usually mild.

Calcium should be considered an adjunctive therapy while preparing for antivenin administration in patients with serious envenomation. Reliance on repeated doses of calcium is often ineffective, delays definitive antivenin therapy, and could predispose to increased morbidity and in rare cases mortality.

Thomas A. Miller, MD
Jacksonville, FL

References

1. Zukowski CW. Black widow spider bite. J Am Board Fam Pract 1993; 6:279-81.
2. Key GF. A comparison of calcium gluconate and methocarbamol (Robaxin) in the treatment of latrodectism (black widow spider envenomation). Am J Trop Med Hyg 1981; 30:273-7.
3. Moss HS, Binder LS. A retrospective review of black widow spider envenomation. Ann Emerg Med 1987; 16:188-92.
4. Timms PK, Gibbons RB. Latrodectism—effects of the black widow spider bite. West J Med 1986; 144:315-7.
5. Maretic Z. Latrodectism: variations in clinical manifestations provoked by *Latrodectus* species of spiders. Toxicon 1983; 21:457-66.
6. Sutherland SK, Trinca JC. Survey of 2144 cases of redback spider bites: Australia and New Zealand 1963-1976. Med J Aust 1978; 2:620-3.

The above letter was referred to Dr. Blackman, who offers the following reply:

To the Editor: We currently use antivenin in children, pregnant women, the elderly who are at high risk for hypertensive crisis and respiratory symptoms, and those with severe pain. In somewhat minor cases, our patients have been responsive to calcium gluconate and have not required antivenin. I agree with Dr. Miller that we are probably underutilizing antivenin. Similar debate goes on with the use of antivenin for the treatment of poisonous snake envenomation, and most of us believe that use of antivenin is warranted and its side effects can be appropriately treated, both acute anaphylaxis as well as chronic serum sickness. Controversies about the use of antivenin will occur until a new antivenin appears, either a pure IgG preparation from horse serum or, even better, a Fab fragment. It is hard to say when this will happen.

James R. Blackman, MD
Boise, ID

Prolonged Delirium Tremens

To the Editor: I have some comments regarding the early management of the 67-year-old patient described in "Prolonged Delirium Tremens Requiring Massive Doses Of Medication" (*J Am Board Fam Pract* 1993, 6:502-4) by Wolf, et al.

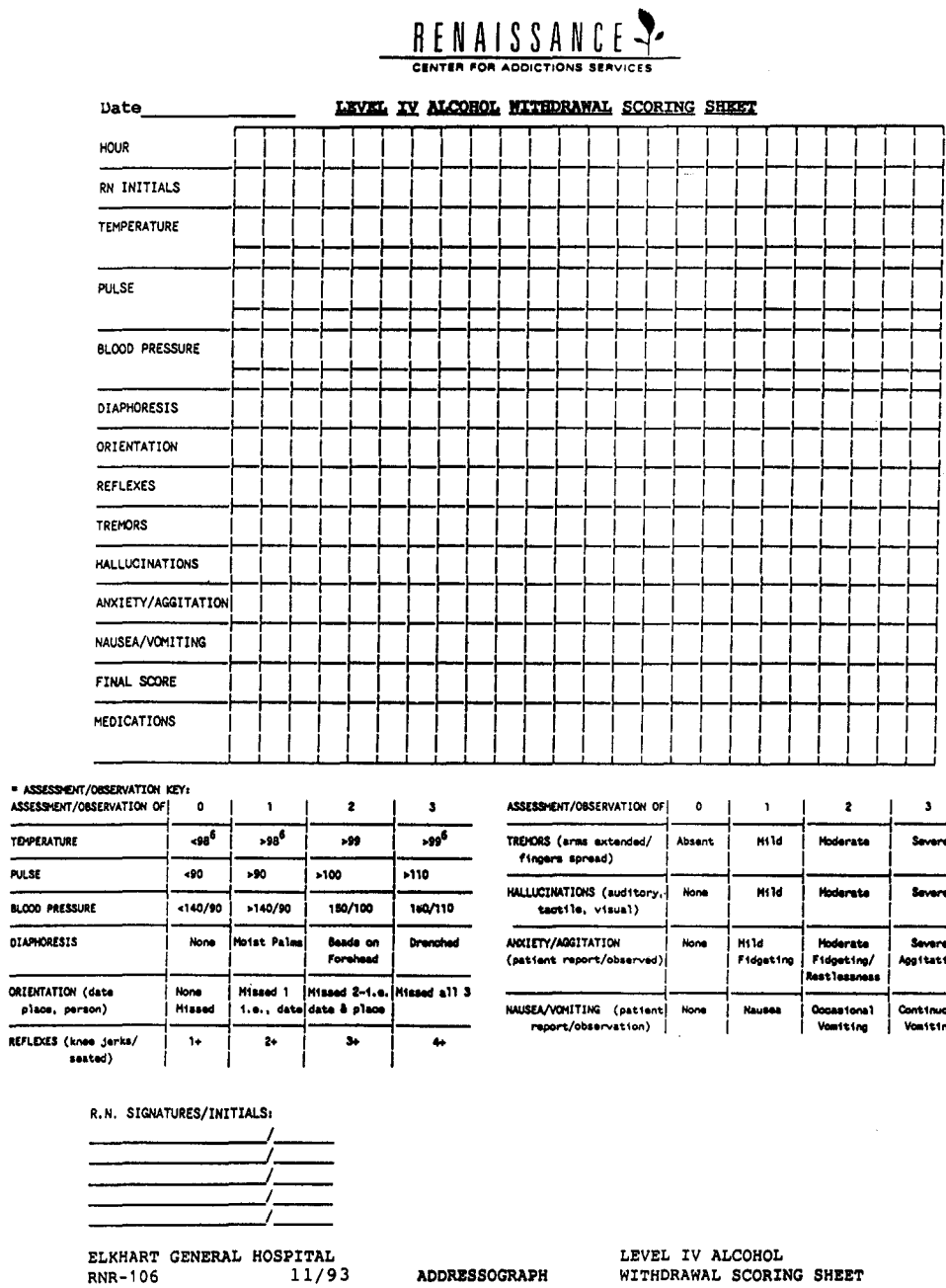
The patient was a chronic alcoholic whose continuous drinking ended 3 days before he came to the emergency department. A physical examination showed disorientation, diaphoresis, tachycardia, tachypnea, tremulousness, brisk reflexes, ocular dysmetria, and spider hemangiomata. He subsequently decompensated further during the following 5 days "despite receiving up to 275 mg/d of oral chlordiazepoxide."

In my daily care of chemically dependent patients with acute alcohol abstinence syndrome in both a general community hospital and a community-based social detoxification unit, it is standard practice to give chlordiazepoxide in 100-mg doses at hourly intervals to maintain vital signs (Figure 1 shows a withdrawal scoring sheet — a score of 6 to 7 and higher usually requires medication). Although most patients require less than 500 mg of chlordiazepoxide total, it is not uncommon that a few will require from 1200 to 2400 mg of chlordiazepoxide in their first 24 hours of admission.

For elderly patients with heptic dysfunction, lorazepam has the advantage of renal excretion. In the nauseated or vomiting patient, lorazepam can be crushed and given sublingually. Lorazepam 5 mg by mouth or 1 mg sublingually can be given at hourly intervals in the place of chlordiazepoxide, but because of its short half-life, the drug must be tapered after the first 24 hours.

The alcoholic's recent drinking pattern, the time of the last drink, previous history of alcohol abstinence syndrome, age, and other medical conditions will give some clue as to how much medication will be needed to control the syndrome. The doses of benzodiazepine needed early to abort the progression from minor withdrawal to delirium are indeed massive when compared with the doses used elsewhere in the practice of clinical medicine. The alcoholic's tolerance is well established, however, and once a patient is "lost" to major withdrawal, it is very difficult to catch up. Extended hospital stays, cerebral dysfunction, and other morbidity, as well as mortality, is well known by those who care for the alcoholic.

Timothy E. Davis, MD
Elkhart, IN



RENAISSANCE
CENTER FOR ADDICTIONS SERVICES

Date_____ LEVEL IV ALCOHOL WITHDRAWAL SCORING SHEET

HOUR																							
RN INITIALS																							
TEMPERATURE																							
PULSE																							
BLOOD PRESSURE																							
DIAPHORESIS																							
ORIENTATION																							
REFLEXES																							
TREMORS																							
HALLUCINATIONS																							
ANXIETY/AGGITATION																							
NAUSEA/VOMITING																							
FINAL SCORE																							
MEDICATIONS																							

* ASSESSMENT/OBSERVATION KEY:

ASSESSMENT/OBSERVATION OF	0	1	2	3
TEMPERATURE	<98[6]	>98[6]	>99	>99[6]
PULSE	<90	>90	>100	>110
BLOOD PRESSURE	<140/90	>140/90	150/100	160/110
DIAPHORESIS	None	Moist Palms	Beads on Forehead	Drenched
ORIENTATION (date place, person)	None Missed	Missed 1 i.e., date	Missed 2-i.e. date & place	Missed all 3
REFLEXES (knee jerks/ seated)	1+	2+	3+	4+

ASSESSMENT/OBSERVATION OF	0	1	2	3
TREMORS (arms extended/ fingers spread)	Absent	Mild	Moderate	Severe
HALLUCINATIONS (auditory, tactile, visual)	None	Mild	Moderate	Severe
ANXIETY/AGGITATION (patient report/observed)	None	Mild Fidgeting	Moderate Fidgeting/ Restlessness	Severe Agitation
NAUSEA/VOMITING (patient report/observation)	None	Nausea	Occasional Vomiting	Continuous Vomiting

R.N. SIGNATURES/INITIALS:

_____/_____
_____/_____
_____/_____
_____/_____
_____/_____

ELKHART GENERAL HOSPITAL
RNR-106 11/93 ADDRESSOGRAPH
LEVEL IV ALCOHOL
WITHDRAWAL SCORING SHEET

Figure 1. Alcohol withdrawal scoring sheet. Reproduced with permission from Elkhart General Hospital, Elkhart, IN.

Cost and Outcome of Inpatient Care

To the Editor: The otherwise excellent paper of MacLean,[1] comparing the outcome and cost of inpatient care by family physicians with that provided by other specialists, contains one problematic statement. Discussing in-hospital mortality for patients in diagnosis-related group (DRG) 243 (medical back disorders), the author asserts that, "there was 1 mortality for family physicians' patients among the 4 in severity group 3 compared with none of 16 for other physicians, a statistically significant difference." The calculation is presumably correct, although some would be uncomfortable with assigning a P value to such small numbers, but the data on which it is based appear to be invalid, illustrating the common fallacy of assuming that information is meaningful just because the numbers are "statistically significant."

The real world mortality rate for medical back disorders is close to zero. People with backache might die of other diseases, in or out of the hospital, but not of back pain *per se*. Those with cancer might have back pain, but it is their malignancy, not their pain,