

Table 1. Acute Viral Titers

	IgG-VCA	IgM-VCA	IgG-EA	IgG-EBNA	VDRL	Toxoplasmosis	Rubella	Cytomegalovirus	Herpes Simplex
Mother	160	>10	<10	Negative	Negative	Negative	1:55	<1:8	1:16
Infant	20	5	<10	Negative	Not done	Negative	1:27	<1:8	1:32

ected infant within the confines of limited follow-up, adds to the existing knowledge of perinatal viral infections and their sequelae.

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Workplace Observation: Key to a Meaningful Office History

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As the workplace becomes more complex in terms of energy, automation, specialization, and chemicals, it becomes more difficult to obtain a good occupational history from the patient. A good history is defined as one the physician can understand and put to use for diagnosis, treatment, prevention, or rehabilitation.

Shortcomings of the Routine Work History

There are a number of difficulties with the standard approach to occupationally related health problems. Often the occupational history is taken as a lengthy questionnaire filled out by patients (with or without assistance) when they first visit.¹ The questionnaire is reviewed and then filed, usu-

ally not to be updated. When the physician tries to obtain a more detailed occupational history, the process is likely to be tedious, time consuming, and less than accurate. Patients vary in their ability to describe the workplace, especially if the physician does not know the appropriate questions to ask. In fact, the more complex, technical, or repetitive the task, the less revealing may be the worker's description. Each workplace has a terminology all its own that the physician may find confusing. Too often a work-related problem is missed because the physician decides, from an inadequate data base, that the workplace is not likely to be relevant in the disease process; the extra effort required to obtain a detailed occupational history is therefore deferred, delegated, or neglected. On the other hand, some workers ascribe to their jobs symptoms that are not work-related.²

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Observation at the Workplace

One way to improve the office-obtained occupational history is to train primary care physicians

Table 1. Five Examples of Typical Patients' Complaints Better Understood by Worksite Visits

Patient's Complaint	Job	Key Observation in Work Environment	Contribution of Work to Illness
Diabetic previously well controlled on insulin presents complaining of new onset of weakness, dizziness, and headaches	Welder in shipyard where old ships are refitted	Patient's job entails climbing to great heights; large increase in daily caloric expenditure	Diabetic well controlled on insulin now has job requiring 2.5 times previous metabolic rate—needs to be instructed how to increase caloric intake or possibly decrease insulin
Group of patients present with low back pain, leg pain	Sorter in a plasticized paper manufacturing plant	Job entails lifting and turning large sheets of plastic-treated paper as it comes out of press every 5 to 10 minutes	Operator's turning and twisting motion while on job places strain on low back and abdominal muscles
Frequent headaches, increased alcoholic consumption, family tension, fatigue	Technician in highly automated polymer plant	Large "sterile" control room with numerous temperature and pressure dials, gauges, and alarm signals. No music, no windows, little conversation	Overwhelming boredom, monotony under potentially dangerous conditions. Long 12-hour shifts
Fatigue, weight loss, insomnia, lack of concentration, bleeding gums, lack of appetite	Quality inspector in plastic and paper product processing plant	Eating areas located within environment; exposure to dust chemicals on food and table tops	Ingestion of toxic chemicals and metal compounds, psychological disadvantages; snack machines reinforce poor dietary habits
Chronic and recurring vesicular hand rashes	Fisherman on research vessel catching and dissecting fish	Grouper, snapper caught in nets, evisceration of fish with dissection of gonads and subsequent preservation in formaldehyde. In nets fish are often caught along with fire sponges. Salt water, cold exposure, and abrasions	Exposed to numerous agents that may cause rashes—fish viscera, fire sponges, formaldehyde

in depth and breadth in industrial medicine.³ During family practice residency training a limited exposure to occupational medicine may be possible through electives and worksite visits.^{4,5} An on-site visit can be an invaluable addition for improving the office history and for increasing understanding of the actual and potential hazards of a given workplace. A systematic factory visit is mentioned in most occupational medicine texts,⁶ but details and forms are left to the reader's imagination. Other authors stress occupational histories but do not specify worksite visits.⁷ It is not feasible for physicians to visit all or most of the worksites of their patients. The sites visited should be selected

for those that employ the largest proportion of patients in the practice. In many communities this will represent only a few major employers. The timing of such visits should be done at the convenience of the physician and the plant manager; obviously, times when a plant tour will meet with resistance, such as following a recent accident, controversy, or labor dispute, should be avoided. Worksite visits can provide a bridge of understanding with employers and workers and reveal certain kinds of work exposures that would be underrecognized in routine or casual history-taking.⁴ Most important, first-hand observation reveals how a variety of symptoms can be related

to specific job exposures. In Table 1, five representative examples are listed.

A Field-Tested On-Site Visit Form

A physician unaccustomed to on-site visits to the workplace may miss important observations. A systematic approach is essential. Over the past two summers with family practice residents and faculty of the Department of Family Medicine, Medical University of South Carolina, a three-part field-tested on-site visit form has been developed (Table 2). An initial section lists the name of the plant, major and minor products and processes, the contact person (plant physician or health professional), number of employees, and on-site health facilities. Much of this section can be completed in advance by telephone or correspondence. The second section deals primarily with the kinds of jobs and the hazards and safety measures associated with each job. This section will require note taking while touring the plant. The last section, to be completed following the on-site visit, consists of a written impression of the workplace and an overall evaluation including perceived hazards that might cause patients to need specific health maintenance and monitoring by laboratory tests. At the end of the form there is a place for reference materials such as safety manuals, description of the manufacturing process, job descriptions, and company policies.

Uses of the On-Site Visit

When using the on-site visit form, medical observers varied most in selecting monitoring tests and in rating the severity of perceived potential health hazards. The on-site visit form is easy to use. With repetition it becomes a timesaver, a more efficient means of obtaining and recording observations. One of the most useful sections for future reference is the overall impression of the work environment, names of key personnel, and a list of job-specific monitoring tests (eg, hearing, pulmonary function, liver function). Recent changes in equipment, products, processes, and exposures can be noted, and the alert physician must keep up with new and evolving alterations in the work environment. As soon as completed, each site visit form adds another valuable document to the office occupational file. The on-site

Table 2. The On-Site Visit Form*
Specifics: Plant name, location, directions, contact person, health professional Major or minor products or process Demographics: Number of employees: blue collar, white collar Hours worked each week Union or nonunion Health facilities Waste disposal: Liquid, solid, gas Safety measures and equipment: Required or provided, protective equipment Kinds of jobs: Terminology, descriptions, psychological and physical hazards Observer impressions: Profile, selected hazards, tests to follow, references for specific chemical processes
*Copies of field-tested forms are available on request from the authors

visit form provides a concise frame of reference for patients' specific job histories, job exposures, and habit patterns. For example, do most workers eat at a bench next to where they work, or down the hall in an open or closed room? Do they smoke on the job? Do they skip lunch or eat primarily off premises?

On-site visits should not be investigative, after-the-fact examinations of work practices with a focus on safety or health infractions; such visits are more appropriate for the occupational specialist. General plant tours are not problem-specific searches for causative agents for a particular illness (eg, dermatitis, respiratory ailments) unless there is a suspicious cluster of such illnesses that may warrant an epidemiologic study.^{8,9}

In the experience of the residents and faculty at the Medical University of South Carolina, the major anticipated obstacles to on-site visits, including excessive time, difficulties in gaining access to facilities, defensiveness of management, and concealment of hazards, do not generally materialize. Visits to nine worksites required an average of one to two hours, excluding travel time. Since the

Continued on page 1184

SINEQUAN® (doxepin HCl)

WORKPLACE OBSERVATION

Reference: 1. Barranco SF, Thrash ML, Hackett E, Frey J, et al (Pfizer Pharmaceuticals, Pfizer Inc., New York, N.Y.): Early onset of response to doxepin treatment. *J Clin Psychiatry* 40:265-269, 1979.

BRIEF SUMMARY

SINEQUAN® (doxepin HCl) Capsules/Oral Concentrate

Contraindications. SINEQUAN is contraindicated in individuals who have shown hypersensitivity to the drug. Possibility of cross sensitivity with other dibenzoxepines should be kept in mind.

SINEQUAN is contraindicated in patients with glaucoma or a tendency to urinary retention. These disorders should be ruled out, particularly in older patients.

Warnings. The once-a-day dosage regimen of SINEQUAN in patients with intercurrent illness or patients taking other medications should be carefully adjusted. This is especially important in patients receiving other medications with anticholinergic effects.

Usage in Geriatrics: The use of SINEQUAN on a once-a-day dosage regimen in geriatric patients should be adjusted carefully based on the patient's condition.

Usage in Pregnancy: Reproduction studies have been performed in rats, rabbits, monkeys and dogs and there was no evidence of harm to the animal fetus. The relevance to humans is not known. Since there is no experience in pregnant women who have received this drug, safety in pregnancy has not been established. There are no data with respect to the secretion of the drug in human milk and its effect on the nursing infant.

Usage in Children: The use of SINEQUAN in children under 12 years of age is not recommended because safe conditions for its use have not been established.

MAO Inhibitors: Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors should be discontinued at least two weeks prior to the cautious initiation of therapy with SINEQUAN. The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered, and the dosage involved.

Usage with Alcohol: It should be borne in mind that alcohol ingestion may increase the danger inherent in any intentional or unintentional SINEQUAN overdose. This is especially important in patients who may use alcohol excessively.

Precautions. Since drowsiness may occur with the use of this drug, patients should be warned of the possibility and cautioned against driving a car or operating dangerous machinery while taking the drug. Patients should also be cautioned that their response to alcohol may be potentiated.

Since suicide is an inherent risk in any depressed patient and may remain so until significant improvement has occurred, patients should be closely supervised during the early course of therapy. Prescriptions should be written for the smallest feasible amount.

Should increased symptoms of psychosis or shift to manic symptomatology occur, it may be necessary to reduce dosage or add a major tranquilizer to the dosage regimen.

Adverse Reactions. NOTE: Some of the adverse reactions noted below have not been specifically reported with SINEQUAN use. However, due to the close pharmacological similarities among the tricyclics, the reactions should be considered when prescribing SINEQUAN.

Anticholinergic Effects: Dry mouth, blurred vision, constipation, and urinary retention have been reported. If they do not subside with continued therapy, or become severe, it may be necessary to reduce the dosage.

Central Nervous System Effects: Drowsiness is the most commonly noticed side effect. This tends to disappear as therapy is continued. Other infrequently reported CNS side effects are confusion, disorientation, hallucinations, numbness, paresthesias, ataxia, and extrapyramidal symptoms and seizures.

Cardiovascular: Cardiovascular effects including hypotension and tachycardia have been reported occasionally.

Allergic: Skin rash, edema, photosensitization, and pruritus have occasionally occurred.

Hematologic: Eosinophilia has been reported in a few patients. There have been occasional reports of bone marrow depression manifesting as agranulocytosis, leukopenia, thrombocytopenia, and purpura.

Gastrointestinal: Nausea, vomiting, indigestion, taste disturbances, diarrhea, anorexia, and aphthous stomatitis have been reported. (See anticholinergic effects.)

Endocrine: Raised or lowered libido, testicular swelling, gynecomastia in males, enlargement of breasts and galactorrhea in the female, raising or lowering of blood sugar levels have been reported with tricyclic administration.

Other: Dizziness, tinnitus, weight gain, sweating, chills, fatigue, weakness, flushing, jaundice, alopecia, and headache have been occasionally observed as adverse effects.

Dosage and Administration. For most patients with illness of mild to moderate severity, a starting daily dose of 75 mg is recommended. Dosage may subsequently be increased or decreased at appropriate intervals and according to individual response. The usual optimum dose range is 75 mg/day to 150 mg/day.

In more severely ill patients higher doses may be required with subsequent gradual increase to 300 mg/day if necessary. Additional therapeutic effect is rarely to be obtained by exceeding a dose of 300 mg/day.

In patients with very mild symptomatology or emotional symptoms accompanying organic disease, lower doses may suffice. Some of these patients have been controlled on doses as low as 25-50 mg/day.

The total daily dosage of SINEQUAN may be given on a divided or once-a-day dosage schedule. If the once-a-day schedule is employed the maximum recommended dose is 150 mg/day. This dose may be given at bedtime. **The 150 mg capsule strength is intended for maintenance therapy only and is not recommended for initiation of treatment.**

Anti-anxiety effect is apparent before the antidepressant effect. Optimal antidepressant effect may not be evident for two to three weeks.

Overdosage.

A. Signs and Symptoms

1. Mild: Drowsiness, stupor, blurred vision, excessive dryness of mouth.
2. Severe: Respiratory depression, hypotension, coma, convulsions, cardiac arrhythmias and tachycardias.

Also: urinary retention (bladder atony), decreased gastrointestinal motility (paralytic ileus), hyperthermia (or hypothermia), hypertension, dilated pupils, hyperactive reflexes.

B. Management and Treatment

1. Mild: Observation and supportive therapy is all that is usually necessary.
2. Severe: Medical management of severe SINEQUAN overdose consists of aggressive supportive therapy. If the patient is conscious, gastric lavage, with appropriate precautions to prevent pulmonary aspiration, should be performed even though SINEQUAN is rapidly absorbed. The use of activated charcoal has been recommended, as has been continuous gastric lavage with saline for 24 hours or more. An adequate airway should be established in comatose patients and assisted ventilation used if necessary. EKG monitoring may be required for several days, since relapse after apparent recovery has been reported. Arrhythmias should be treated with the appropriate antiarrhythmic agent. It has been reported that many of the cardiovascular and CNS symptoms of tricyclic antidepressant poisoning in adults may be reversed by the slow intravenous administration of 1 mg to 3 mg of physostigmine salicylate. Because physostigmine is rapidly metabolized, the dosage should be repeated as required. Convulsions may respond to standard anticonvulsant therapy, however, barbiturates may potentiate any respiratory depression. Dialysis and forced diuresis generally are not of value in the management of overdose due to high tissue and protein binding of SINEQUAN.

More detailed professional information available on request.

Continued from page 1181

group consisted of 8 to 10 observers, a physician touring alone would probably take less time. Usually one-half hour of interesting questions and answers in the administration office of the plant preceded the walk-through tour. Supervisory personnel were extremely cooperative. They consistently wanted to show off their plant, the quality of the product, and their concern for the worker. Access was not denied to any plant; however, this is a small sample and may not be representative. Fear of medicolegal involvement may influence some physicians to be reluctant to visit plants. This fear appears to be unfounded.

Comment

The on-site visit provides information far beyond that obtained by the occupational history. As industries diversify and settle in less densely populated communities, more physicians will encounter a variety of job-related disabilities. In large industrial communities where there are numerous plants, one may choose to refer patients or diagnostic questions to the local occupational medicine specialist.

Many physicians will be asked to serve local plants on an emergency or perhaps continuing basis. It is not logical or even ethical to do so without a planned visit to the industry for which one will be held responsible for medical services. Worksite visits should be tried. One hour of systematic observation at the plant is worth more than dozens of routine work questionnaires filled out in the waiting room of the office.

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