Correspondence

The Editorial Board will be pleased to receive and consider for publication correspondence containing information of interest to physicians or commenting on issues of the day. Letters ordinarily should not exceed 600 words, and must be typewritten, double-spaced and submitted in duplicate (the original typescript and one copy). Authors will be given an opportunity to review any substantial editing or abridgement before publication.

Earwig in the Ear

TO THE EDITOR: Earwigs are nocturnal, drab-colored insects of the order *Dermaptera* that are attracted to light and occasionally creep into homes. Their chewing mouthparts and forceps-like abdominal appendages give them a foreboding appearance.

The common name for these anthropods in at least six European languages incorporates a word for ear. The extended hindwing of some species resembles the shape of a human ear and the earwig's pincers look like instruments once used to pierce women's ears for earrings. Furthermore, there is an ancient Anglo-Saxon legend that they crawl into the ears of sleeping persons. Entomologists, however, insist that this belief is without foundation.¹⁻³ The following is the second report from Arizona—and also only the second in English literature—to document the veracity of the legend.

At 3 AM, my 8-year-old daughter awoke me from a sound sleep. She was extremely upset. For the preceding few minutes she had attempted to remove a creature crawling about in her left external ear canal. A light sleeper, she had been aroused by "the sound of little feet." Otoscopic examination revealed a dark brown mass near the tympanic membrane. My brief discussion with her on the importance of proper hygiene was interrupted when I saw the form move. Then, bathed in brilliant illumination from the otoscope, a female earwig (family, *Carcinophoridae*), measuring 20 mm in length, cautiously emerged, to the relief of insect, child and father.

Earwigs do not, as once believed, enter the brain to cause insanity but they can enter the external ear canal while we sleep. Some species pinch sharply and forcibly eject a highly irritating fluid from abdominal glands.⁴ In the previous report⁵ a male European earwig (*Forficula auricularia*) punctured and lacerated the tympanic membrane of a sleeping graduate student in Flagstaff, Arizona.

Earwigs are relatively harmless and, in all likelihood, enter the human ear rarely and only by chance. Nevertheless, they can produce severe otic trauma lending credence to an ancient "myth."

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3. Borror DJ, DeLong DM, Triplehorn CA: An Introduction to the Study of Insects. Philadelphia, Saunders, $1981, p\,236$

4. Eisner T: Defense mechanisms of anthropods II—The chemical and mechanical weapons of an earwig. Psyche 1960; 67:62-70

5. Taylor JD: The earwig: The truth about the myth. Rocky Mt Med J 1978; $75{:}37{-}38$

Costs and Value of Screening Flexible Sigmoidoscopy

To THE EDITOR: The article by Rumans and associates¹ in the June 1986 issue, which justifies the cost-effectiveness of screening flexible sigmoidoscopy in asymptomatic patients over 50 years of age with three stool tests (Hemoccult) negative for occult blood, will be helpful for my marketing program. The following questions, however, remain unanswered:

• Of the malignant lesions and precancerous polyps discovered, how many would eventually have been detected by Hemoccult tests alone or become symptomatic while still curable (if curable can be defined) had no sigmoidoscopy been done?

• What is the value of the lives saved, morbidity avoided and medical care costs unspent as a result of the treatment following these discoveries?

• How do these savings compare to the total program cost per discovered and treated and cured condition, which condition statistically would not have been cured but for the flexible sigmoidoscopy?

• If it is my patient and he or she can pay for the test, how much should cost-effectiveness criteria affect my decision to perform or withhold the examination?

It seems very complicated to prove the cost-effectiveness of this examination.

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1. Rumans MC, Benner KG, Keefe EB, et al: Screening flexible sigmoidoscopy by primary care physicians—Effectiveness and costs in patients negative for fecal occult blood. West J Med 1986 Jun; 144:756-758

Editor's Note:

Would that we knew the answers to these questions.

MSMW

Toxicity from BHT Ingestion

TO THE EDITOR: In a letter in the August 1983 issue of the journal, Dr J.G. Llaurado expressed concern over the possible toxicity from ingestion of large amounts of butylated hydroxytoluene (BHT) in the pursuit of a cure for herpes genitalis and of long life.¹ I have just such a case to report.

Report of a Case

A 24-year-old woman, an advertising executive, complained of light-headedness, unsteadiness of gait and slurred speech. The following findings were noted on examination: dysarthria, wide-based gait, a positive Romberg test, slowed mentation without thought disorder and dysmetria of the left (nondominant) arm. The pupils were of normal size and reactivity and there was no nystagmus. Results of routine laboratory studies, including serum electrolyte, bicarbonate, liver and renal function, electrocardiographic and chest x-ray studies, were all normal or within normal limits. Repeat examination eight hours later showed no abnormalities.

The patient said that she had obtained a formula for BHT ingestion as a cure for genital herpes from a man advertising himself in a local newspaper as a "researcher" in herpes treatment. When contacted, the man explained to me that he had read of this treatment in *Secrets of Life Extension* by John A. Mann.² On the evening before admission, the patient ingested 80 grams of BHT suspended in safflower oil on an empty stomach. Between 30 and 60 minutes later, she began to experience a light-headed, "high" feeling followed by a severe frontal headache and visual and auditory hallucinations over the next several hours. When she awakened the next morning, she was unsteady on her feet, had slurred speech and complained that sounds and voices were "far away."

Discussion

My review of the medical literature reveals that previously reported human toxicity is confined to suspected allergic reactions.³ The best source available on human and animal ingestion is the Franklin Research Center review.⁴ It reports no evidence of human toxicity in doses as high as 6 grams per day over a course of 30 days. The reported half-life in humans is less than 24 hours, which is consistent with the time course in our patient. Our patient's symptoms and signs and those reported in the literature in animals correlate well.

The source used by Mr Mann in his book to justify BHT to treat herpes is a report by Snipes and associates on the in vitro inactivation of herpes virus by BHT.⁵

Fortunately for our patient, follow-up at six months and one year showed no long-term toxicity. However, she has had outbreaks of her herpes.

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1. Llaurado JG: Beware of phenolic antioxidants (BHT and BHA) (Correspondence). West J Med 1983 Aug; 139:229-230

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3. Fisherman EW, Cohen G: Chemical intolerance to butylated-hydroxyanisole and butylated-hydroxytoluene and vascular response as an indicator and monitor of drug tolerance. Ann Allergy 1973 Mar; 31:126-133

4. A Review of the Food Additive, Butylated Hydroxytoluene. Philadelphia, Franklin Research Center, 1978

5. Snipes W, Person S, Keith A, et al: Butylated hydroxytoluene inactivated lipidcontaining viruses. Science 1975 Apr; 188:64-66

Psychological Factors in Back Pain

TO THE EDITOR: The article on psychological aspects of back pain by Derebery and Tullis in the May issue¹ offers almost a full reprise of the criteria for histrionic personality disorder as stipulated by the American Psychiatric Association's *Diag*- nostic and Statistical Manual of Mental Disorders (Third Edition).

But, having established this diagnosis implicitly, the authors do not make it explicit, nor, indeed, do they account for their not offering any formal *DSM-III* diagnoses among these patently psychiatric patients.

One is nonplussed as to their reasons for this omission.

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REFERENCE

1. Derebery VJ, Tullis WH: Low back pain exacerbated by psychosocial factors. West J Med 1986 May; 144:574-579

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Dr Tullis Responds

TO THE EDITOR: In our experience the majority of the type of patients described in this article do not easily fall into the categories outlined in *DSM-III*. Occasionally, a patient may meet the criteria for one of the disorders such as somatization disorder, conversion disorder, psychogenic pain disorder, hypochondriasis, posttraumatic stress disorder or depression. More often than not, however, the patient is simply manifesting a maladaptive response to stress that does not meet the necessary criteria for one of these diagnoses.

We do not concur that the paper offers a full description of the histrionic personality disorder as outlined in *DSM-III*. Although such patients may manifest some of these traits during the time of their physical problems, it is often not representative of their long-term behavior. The *DSM-III* states very clearly that in the histrionic personality disorder these traits are characteristic of the individual's current and long-term functioning and are not limited to episodes of illness.

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The Layer Cake Phenomenon or Sweet It Isn't

To THE EDITOR: As pharmacists, we are often asked on clinical rounds about individual drug side effects and adverse effects concerning a patient receiving "polypharmacy." What ensues is a lengthy discourse on sometimes as many as 15 different medications. We have since gone to what we call the "layering method" in describing a drug's beneficial or possible detrimental effects. This method is quite popular with the physicians who have gone into "layering" because it involves listing out and comparing, for each drug, similarity of action, side effects—including possible electrolyte alterations—and how therapy can alter the disease state for better or worse.

All those concerned with patient care should realize that in regard to side effects, a new layer of problems is "layered" upon the patient, or at least potentially so, as each drug is added to the therapeutic regimen. When one is caring for a patient receiving digoxin, parenteral amphotericin B and furosemide, the loss of potassium if not closely monitored can be an extreme misadventure. In our opinion, "layering," which can even be adapted to a computer spreadsheet, is an efficient and simple methodology for examining the clinical pharmacology of patient care. One more word of caution: