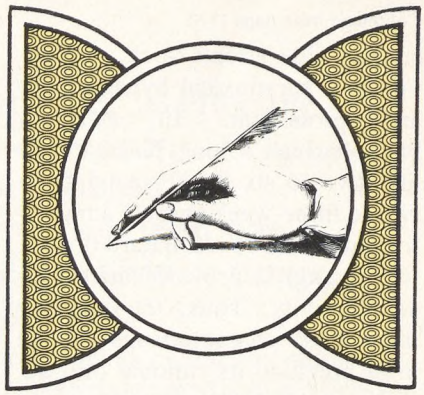
# Letters to the Editor

The Journal welcomes Letters to the Editor; if found suitable, they will be published as space allows. Letters should be typed double-spaced, should not exceed 400 words, and are subject to abridgment and other editorial changes in accordance with journal style.



## Nursing Practice and Medical Practice

To the Editor:

I read with interest the editorial in your December issue, "Is There a Difference Between Nursing Practice and Medical Practice?" (*Geyman JP. J Fam Pract 5:935, 1977*). Physician assistants and other mid-level practitioners have been addressing this issue on a local and national level for some time.

In striving toward the concept of independent practice, the nurse practitioner movement has diverged from the main body of physician extenders. We join our colleagues in condemning such an action as a dangerous trend which will ultimately benefit no one, least of all the patient (who is, after all, being confronted by an already confusing array of health-care providers).

In this time of rapidly expanding medical knowledge our efforts should be directed toward a unification of medical and psychosocial skills. A suitably trained physician extender is often an integral part of such an organized health-care team. However, the fragmentation of the team caused by the spin-off of independent practitioners is certainly a step backwards in terms of the quality of care provided. To rationalize such lower-quality care as being more "accessible" still does nothing to improve the quality.

*Les E. Landry, PA-C*
*Harold W. Muecke, PA-C*
*Family Practice Residency Program*
*Medical Center of Central Georgia*
*Macon, Georgia*

## Phenobarbital for Febrile Convulsions

To the Editor:

Dr. Shrand, in his recent review, "Rational Drug Therapy of Common Illnesses in Children" (*J Fam Pract 4:645, 1977*), advocated the use of prophylactic oral phenobarbital at the onset of fever in the child with a history of febrile convulsions. Although there is significant controversy concerning the use of phenobarbital acutely and intermittently,[1-3] oral administration is hardly rational.[4]

Phenobarbital's oral absorption is 70 to 90 percent complete, but slow,[5] so that even with high doses (10 mg/kg), a period of 12 hours is required for the drug to reach therapeutic levels of 10 to 20 mcg/ml.[6] At this dosage level, of

Continued on page 1174

Continued from page 1173

course, side effects such as sedation and paradoxical hyperactivity are prominent. In addition, phenobarbital's long plasma half-life (two to six days)[5] mandates a two to three-week chronic administration period of a standard dose (1 to 3 mg/kg) to provide anticonvulsant activity. Thus, the biopharmaceutical characteristics of the drug preclude its rational oral administration in this situation.

Rapid (one hour) therapeutic levels can be obtained and maintained through the use of an intramuscular loading dose (10 mg/kg) followed by oral dosing until the fever defervesces,[2] if the intermittent method is chosen.

*Allan Ellsworth, Pharm D*
*University of Iowa*
*College of Pharmacy*
*Pioneer Medical Center*
*Mechanicsville, Iowa*

*F. L. Thompson, MD*
*Cedar Rapids Medical*
*Education Program*
*Pioneer Medical Center*
*Mechanicsville, Iowa*

## References

1. Wolf SM, Carr A, Davis DC, et al: The value of phenobarbital in the child who has had a single febrile seizure: A controlled prospective study. Pediatrics 59:378, 1977
2. Wolf SM: Effectiveness of daily phenobarbital in the prevention of febrile seizure recurrences in "simple" febrile convulsions and "epilepsy triggered by fever." Epilepsia 18:95, 1977
3. Heckmatt JZ, Houston AB, Clow DJ, et al: Failure of phenobarbitone to prevent febrile convulsions. Br Med J 1:559, 1976
4. Wallace SJ: Febrile fits. Br Med J 1:333, 1976
5. Woodbury DM, Fingl F: Drugs effective in the therapy of the epilepsies. In Goodman LS, Gillman A (eds): The Pharmacological Basis of Therapeutics (ed 5). New York, Macmillan, 1975, pp 201-226
6. Svensmark O, Buchthal F: Accumulation of phenobarbital in man. Epilepsia 4:199, 1963

*The preceding letter was referred to Dr. Shrand who responds as follows:*

Regarding the use of oral phenobarbital given at the onset of the fever in the hope of preventing a febrile seizure, I must agree with the comments of Ellsworth and Thompson.

On the other hand, continuous oral phenobarbital (or other appropriate anticonvulsant) administration is recommended if the first febrile convulsion meet any of the following criteria:[1]

1. The patient is less than 18 months of age.
2. The seizures lasted longer than 15 minutes, were focal, or occurred more than once in 24 hours.
3. EEG abnormalities are found seven to ten afebrile days after the seizures.
4. Signs of a neurological deficit are present.
5. There is a family history of seizures.

If the patient shows none of the above characteristics with the first seizure but has a second one, then phenobarbital on a long-term basis is also recommended.

If the patient is actually having a seizure, anticonvulsants should be given by the intramuscular or intravenous route for the reasons stated by Ellsworth and Thompson.

*Hyman Shrand, MD*
*Chief of Division of Pediatrics and*
*Adolescent Medicine*
*Mount Auburn Hospital*
*Cambridge, Massachusetts*

## Reference

1. Rabe EF: Editorial comment on Nelson KB, Ellenberg JH: Predictors of epilepsy in children who have experienced febrile seizures (N Engl J Med 295:1029, 1976). In Gellis SS: Year Book of Pediatrics 1978. Chicago, Year Book Medical Publishers, 1978, pp 305-307