

ACUTE INTERMITTENT PORPHYRIA

To the Editor:

My colleagues and I congratulate Drs. Shah, Remoroza, and Aziz on their excellent and brief review of acute intermittent porphyria (AIP),¹ an always challenging topic faced by physicians (including neurologists), which appeared in the February 2002 issue of *Hospital Physician*.

We agree that the list of drugs that may provoke an AIP attack continues to grow longer with every new textbook edition. However, as neurologists, we are careful about the use of phenytoin, carbamazepine, and valproic acid in porphyrias in general; we consider gabapentin a safe alternative.²

We wish to emphasize that screening for porphyrias is indicated in all cases of acute progressive (poly)neuropathy, especially because AIP was reported as a neglected, and rare, differential diagnosis of Guillain-Barré syndrome.³ However, we believe that a prior history of generalized symptoms (eg, abdominal pain, constipation) should trigger the suspicion of AIP as a cause of newly progressive polyneuropathy.

Interpreting results of porphobilinogen measurement must be performed carefully, because a few sources of errors have been reported: an increased activity during or just after an acute attack (when erythrocyte levels are higher than normal), results in infants who are younger than 6 months, and results in patients with lymphoproliferative disease.⁴

Hematin usage carries a few restrictions and risks; it should not be used in conjunction with anticoagulation therapy, and the site for venous infusion must be changed on a daily basis.⁴ Both heme arginate and heme albumin are chemically stable and less likely to produce phlebitis or anticoagulant effect than is hematin.⁵

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In reply:

We greatly appreciate the interest of Dr. Morcos in our article. He underscores the importance of using safe anticonvulsant agents, especially gabapentin. Besides gabapentin, bromides and, most likely, vigabatrin can also be given safely.^{1,2} Until recently, interventions in the acute porphyric states were only partially satisfactory and often limited to preventive measures and symptomatic treatment.³ Today most patients can be treated successfully, and life-threatening complications can be avoided with prompt diagnosis and early treatment. Recommendations for symptomatic treatment of patients who have acute porphyria attacks are based on personal experience as well as articles in different medical journals over the past few years and include: diazepam and clonazepam for convulsions; acetyl salicylic acid, morphine, and pethidine for abdominal pain; chlorpromazine and promethazine for vomiting; propranolol for hypertension and tachycardia; and electrolyte balance and saline infusions for hyponatremia.⁴

The list of medications to be avoided in patients with porphyrias is ever increasing. Extensive information about these drugs can be obtained from the following Web sites: <http://www.uct.ac.za/depts/liver>, <http://www.uq.edu.au/porphyria>, and <http://www.porphyrries.com.fr>.

Since the early 1970s, acute attacks have been treated with hematin preparations.⁵ A lyophilized hematin (hydroxyheme) preparation is available. It is reconstituted with sterile water. The product is, however, unstable, and degradation products adhere to endothelial cells, platelets, and coagulation factors, causing a transient anticoagulant effect and phlebitis at the site of infusion. Reconstitution with human albumin enhances the stability of hematin and can prevent these adverse effects,¹ although a high percentage of patients may have thrombophlebitis.⁶ Intravenous administration of heme arginate (Normosang) rather than hematin does not cause any significant changes in coagulation and fibrinolysis, but the overall rate of adverse effects is decreased.⁷

We agree that interpretation of tests to detect porphyrias must be performed carefully because of situations that can give false-positive or false-negative results. Ideally, we should be able to identify every patient, but

because of confounding variables (eg, uremia, hepatitis, lymphoproliferative disorders, hemolytic conditions), there can be discrepancies. As a differential diagnosis of newly progressive polyneuropathy, decompensated pre-existing diseases of the nerves, muscles, and motor neurons should be considered. Conditions such as acute Guillain-Barré syndrome, exacerbated myasthenia gravis, porphyric attacks, decompensated motor neuron or muscle disease (metabolic or inflammatory), botulism, and organic phosphate poisoning also have to be considered.⁸

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