### ORIGINAL CONTRIBUTION

169  
A single prophylactic dose of ceftriaxone as total antibiotic therapy in transurethral surgery  
LEONARD H. FINKELSTEIN, DO, FACOS, Bala Cynwyd, Pennsylvania  
This retrospective study examines whether a single dose of ceftriaxone can be used as total antibiotic therapy in transurethral surgery.

### BRIEF REPORTS

171  
Naloxone alteration of blood flow in a nonischemic region of the partially ischemic gerbil brain  
DANLEY F. BROWN, PHD, STEPHEN P. LARSEN, PHD, CYRUS PARSA, DO, Kansas City, Missouri  
Naloxone (NAL), an opiate antagonist, was studied to see its effect on cerebral blood flow in the partially ischemic gerbil brain. The findings suggest that NAL may alter brain blood flow independently of ischemia.

175  
Avoiding the risk of aspiration in intubated infants  
JOSEPH M. BRAND, DO, Green Bay, Wisconsin; NANCY L. BRODSKY, PHD, HALLAM HURT, MD, Philadelphia, Pennsylvania  
This prospective study assessed the problem of aspiration in intubated infants who are fed orogastrically or oroduodenally.

### CLINICAL PRACTICE

181  
Diagnosis and management of ventricular dysphonia  
CHRISTOPHER P. VON HAKE, DO, Pekin, Illinois; ILENE P. GANZMAN, MS, THEODORE P. MAUER, DO, Philadelphia, Pennsylvania  
Three illustrative cases of ventricular dysphonia that represent iatrogenic, traumatic, and neurologic forms of the disorder are reported.

### CASE REPORTS

185  
Subcutaneous emphysema and pneumomediastinum complicating labor in a twin pregnancy  
This article documents the first cases of Hamman's syndrome complicating the labor of a twin gestation. Management guidelines are presented.

*continued on page 127*
CARNATION INTRODUCES

GOOD NATURE®
Iron Fortified Follow-Up Formula

For babies over six months of age
eating solid foods

itionally completes baby’s solid diet. When baby reaches the solid stage, approximately 6 months of age, formula is no longer his sole source of nutrients, yet, the high-carbohydrate cereals, fruits, and vegetables he eats are low in nutrients. And, older babies require more energy from fat and more from protein. Carnation developed GOOD NATURE Follow-Up Formula, specifically designed to complement the diet of babies who are already eating solid food.

GOOD NATURE makes good sense. Unlike starter formula, GOOD NATURE is a follow-up formula that provides added nutrients for the older baby’s optimal growth and development. GOOD NATURE contains more protein and calcium than starter formula to support the increased metabolic needs of bone mineralization and muscle growth.

The ratio of unsaturated to saturated fatty acids in GOOD NATURE is 2:1.

GOOD NATURE is higher in monounsaturated fatty acids yet contains 28% less fat than starter formula to satisfy the changing needs of the older baby.

GOOD NATURE is good nutrition. GOOD NATURE also has a carbohydrate blend of 63% corn syrup solids and 37% lactose to help assure tolerance. It contains 12 mg iron per quart to help ensure a sufficient supply of iron at an age when inborn stores are depleted.

GOOD NATURE costs less than starter formula and also tastes, smells, and looks like the real food baby is learning to enjoy.

For nutritional information, see next page.

When baby is ready for solid food, Mom may ask you about GOOD NATURE Follow-Up Formula. You can reassure her that GOOD NATURE is nutritionally sound and makes good sense for her baby.

For more information on Carnation’s new GOOD NATURE Follow-Up Formula, please write to: Carnation Nutritional Products, 5045 Wilshire Blvd., Los Angeles, CA 90036.

GOOD NATURE Follow-Up Formula, now available to consumers in 32 fl. oz. ready-to-feed fresh packs and 12 oz. easy-to-mix powder canisters.

Setting the stage for better development™
### Stages of Baby Feeding

- **Birth up to 6 months**
  - **NURSING DIET**
    - Mother's milk and/or starter formula

- **6 months up to 12 months**
  - **TRANSITIONAL DIET**
    - Mother's milk and/or GOOD NATURE® with cereals, fruits, vegetables

  *Not to replace breast milk. Use only when breast feeding is not an option. Intended only for babies over 6 months of age eating solid foods.

- **Over 12 months**
  - **MODIFIED ADULT DIET**
    - Cow's milk and table food

### Protein Requirements During the First Year of Life

<table>
<thead>
<tr>
<th>Age</th>
<th>Average weight, kg</th>
<th>Protein g/kg</th>
<th>Requirements per day, g</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6 months</td>
<td>6.0</td>
<td>2.2</td>
<td>13.2</td>
</tr>
<tr>
<td>6-12 months</td>
<td>9.0</td>
<td>2.0</td>
<td>18.0</td>
</tr>
</tbody>
</table>

### Comparative Nutritional Analysis of GOOD NATURE Follow-Up Formula and Starter Formula

Nutrition information per 100 calories (5 fl oz prepared as directed)

<table>
<thead>
<tr>
<th>NUTRIENTS:</th>
<th>GOOD NATURE Follow-Up Formula (%)</th>
<th>Calorie Distribution (%)</th>
<th>Milk-Based Starter Formula (%)</th>
<th>Calorie Distribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>3.0 g</td>
<td>12.0</td>
<td>2.22 g</td>
<td>8.9</td>
</tr>
<tr>
<td>Fat</td>
<td>3.9 g</td>
<td>35.1</td>
<td>5.37 g</td>
<td>48.8</td>
</tr>
<tr>
<td>Carbohydrate</td>
<td>13.2 g</td>
<td>52.8</td>
<td>10.7 g</td>
<td>42.8</td>
</tr>
<tr>
<td>Water</td>
<td>134 g</td>
<td>131 g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linoleic Acid</td>
<td>700 mg</td>
<td>1,000 mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VITAMINS:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin A</td>
<td>250 IU</td>
<td>300 IU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin D</td>
<td>65 IU</td>
<td>60 IU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin E</td>
<td>0.8 IU</td>
<td>3.0 IU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin K</td>
<td>8.1 mcg</td>
<td>8 mcg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thiamine</td>
<td>80 mcg</td>
<td>100 mcg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riboflavin</td>
<td>96 mcg</td>
<td>150 mcg</td>
<td></td>
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<tr>
<td>Vitamin B5</td>
<td>66 mcg</td>
<td>60 mcg</td>
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<td></td>
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<tr>
<td>Vitamin B12</td>
<td>0.32 mcg</td>
<td>0.35 mcg</td>
<td></td>
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<tr>
<td>Niacin</td>
<td>1,280 mcg</td>
<td>1,050 mcg</td>
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<tr>
<td>Folic Acid</td>
<td>16 mcg</td>
<td>15 mcg</td>
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<tr>
<td>Panthenic Acid</td>
<td>400 mcg</td>
<td>450 mcg</td>
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<tr>
<td>Biotin</td>
<td>1.5 mcg</td>
<td>14 mcg</td>
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<tr>
<td>Vitamin C</td>
<td>8 mg</td>
<td>9 mg</td>
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<tr>
<td>MINERALS:</td>
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</tr>
<tr>
<td>Calcium</td>
<td>135 mg</td>
<td>75 mg</td>
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<td></td>
</tr>
<tr>
<td>Phosphorus</td>
<td>90 mg</td>
<td>58 mg</td>
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<tr>
<td>Magnesium</td>
<td>8.1 mg</td>
<td>6 mg</td>
<td></td>
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</tr>
<tr>
<td>Iron</td>
<td>1.9 mg</td>
<td>1.8 mg▼</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc</td>
<td>0.63 mg</td>
<td>0.75 mg▼</td>
<td></td>
<td></td>
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<tr>
<td>Manganese</td>
<td>7 mcg</td>
<td>5 mcg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>76 mcg</td>
<td>90 mcg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iodine</td>
<td>5.7 mcg</td>
<td>15 mcg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium</td>
<td>39 mg</td>
<td>32 mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium</td>
<td>135 mg</td>
<td>129 mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chloride</td>
<td>90 mg</td>
<td>75 mg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**INGREDIENTS:** © NONFAT DRY MILK, CORN SYRUP SOLIDS, PALM OIL, CORN OIL, HIGH-OLEIC SAFFLOWER OIL, CALCIUM PHOSPHATE, CALCIUM CITRATE, SODIUM ASCORBATE, FERROUS SULFATE, MAGNESIUM CHLORIDE, ZINC SULFATE, Niacinamide, Alpha tocopherol acetate, calcium pantothenate, copper sulfate, vitamin A acetate, thiamine mononitrate, riboflavin, pyridoxine hydrochloride, folic acid, manganese sulfate, phylloquinone (vitamin K), potassium iodide, vitamin D3, biotin, vitamin B12. ▼All nutrients, plus the renal solute load for GOOD NATURE, are within the ranges recommended by AAP/CON for older babies. ▲Based on Similac® product labeling, Ross Laboratories, 1986. ▼The addition of iron to this formula conforms to the recommendations of AAP/CON.

**REFERENCES:**

**Setting the stage for better development™**

![Image of Carnation logo]

SP-022 12/8
Bronchial and gastrointestinal cryptosporidiosis in AIDS
R.S. GOODSTEIN, DO, C.S. COLOMBO, DO, M.A. ILLFELDER, DO, R.E. SKAGGS, DO, York, Pennsylvania
This report documents a case of cryptosporidiosis in an AIDS patient. There were both bronchial and gastrointestinal manifestations.

Thrombotic thrombocytopenic purpura
KEVIN C. MCCORMICK, DO, Rome, New York
Thrombotic thrombocytopenic purpura was once thought to be rare, but it is increasingly being recognized. A case is reported, and the major clinical findings, pathophysiology, diagnosis, and therapy are discussed.

Facial nerve palsy secondary to acute otitis media
PATRICK E. HENDERSON, DO, SAMUEL C. BALDONE, DO, Columbus, Ohio
Because acute otitis media is diagnosed commonly in the pediatric population, clinicians need to be aware of the numerous complications. As in the case reported, facial paralysis may be the initial complaint in the child in whom acute otitis media later developed on the affected side.

New problems with old concerns, GEORGE W. NORTHUP, DO, FAAO

More common than leukemia, muscular dystrophy, and multiple sclerosis, lupus affects approximately one in 500 Americans, 90% of whom are women.

“Lupus: The wolf bite that may be more than skin deep” discusses the possible causes of this disorder, with an emphasis on the various diagnostic methods and treatment approaches employed in caring for such patients.

Magnetic resonance imaging scan showing left-sided lacunar infarction. This was part of the radiologic workup of a case of thrombotic thrombocytopenic purpura. The article, by Kevin C. McCormick, D.O., begins on page 199. Cover design by Barry and Wayne Lau of Design Two, Ltd.

All opinions expressed in JAOA are those of the authors and not necessarily those of the editors, the AOA, or the institution with which the authors are affiliated, unless expressly stated. JAOA is indexed by Index Medicus, Excerpta Medica, Current Contents (Clinical Practice), Biological Abstracts, and Chemistry Abstracts.

No part of the JAOA may be reprinted or reproduced in any form without written permission of the editor.
All formulations of PEPCID® (Famotidine, MSD) are contraindicated in patients who are hypersensitive to any component of these products.
For many patients with active duodenal ulcer...

**PAIN RELIEF BEGINNING DAY 1**

**COMPLETE PAIN RELIEF BY WEEK 1**

**COMPLETE HEALING BY MONTH 1**


**TABLETS, 40 mg**

**Pepcid® ONCE A DAY**

**(Famotidine/MSD)**

**RIGHT FROM DAY 1**

For a Brief Summary of Prescribing Information, please see the following page.
Contraindications: Hypersensitivity to any component.

Precautions: General: Symptomatic response to therapy does not preclude the presence of gastric malignancy.

Patients with Severe Renal Insufficiency: Longer intervals between doses or lower doses may be needed in patients with severe renal insufficiency (creatinine clearance < 10 mL/min) to adjust for the longer elimination half-life of famotidine (see Clinical Pharmacology and Dosage and Administration sections of Prescribing Information).

Information for Patients: The oral suspension should be shaken vigorously for 5 to 10 seconds prior to each use, and unused constituted oral suspension should be discarded after 30 days.

Drug Interactions: No drug interactions have been identified. Compounds tested in man include warfarin, theophylline, phenytoin, diazepam, amoxicillin, and antipyrine.

Carcinogenesis, Mutagenesis, Impairment of Fertility: In rats and mice given oral doses up to approximately 2,500 times the recommended human dose for active duodenal ulcer, there was no evidence of carcinogenic potential; at these doses in rats, fertility and reproductive performance were not affected. No evidence of a mutagenic effect was observed.

Pregnancy: Pregnancy Category B—There are no adequate or well-controlled studies in pregnant women. Use during pregnancy only if clearly needed.

Nursing Mothers: It is not known whether famotidine is secreted into human milk; however, it is secreted into the milk of lactating rats. A decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Use in Elderly Patients: No dosage adjustment is required based on age but may be necessary in severe renal impairment (see Clinical Pharmacology and Dosage and Administration sections of Prescribing Information).

Adverse Reactions: The adverse reactions listed below have been reported during domestic and international clinical trials in approximately 2,500 patients. In the placebo-controlled clinical trials, the incidence of adverse experiences with PEPCID Tablets 40 mg at bedtime was similar to that with placebo.

Incidence Greater than 1%: The following adverse reactions have been reported to occur in more than 1% of patients on therapy with PEPCID in controlled clinical trials and may be causally related to the drug: headache (4.7%), dizziness (1.3%), constipation (1.2%), and diarrhea (1.7%).

Causal Relationship Unknown: The following other adverse reactions have been reported infrequently and within each category are listed in order of decreasing severity. The relationship to therapy with PEPCID has been unclear in many cases. Body as a Whole—Fever, asthenia, fatigue. Cardiovascular—Palpitation. Gastrointestinal—Cholestatic jaundice, liver enzyme abnormalities, vomiting, nausea, abdominal discomfort, anorexia, dry mouth. Hematologic—Thrombocytopenia, Hypersensitivity—Anaphylaxis, angioedema, oribital or facial edema, urticaria, rash, conjunctival injection. Musculoskeletal—Musculoskeletal pain, arthralgia. Nervous System/Psychiatric—Grand mal seizure; psychic disturbances including depression, anxiety, decreased libido, hallucinations; parasthesis, insomnia; somnolence. Respiratory—Bronchospasm. Skin—Alopecia, acne, pruritus, dry skin, flushing. Special Senses—Tinnitus, taste disorder.

The adverse reactions reported for PEPCID Tablets may also occur with PEPCID Oral Suspension or PEPCID I.V., in addition, transient irritation at the injection site has been observed with PEPCID I.V.

AV block has been reported with other H₂-receptor antagonists, but not with famotidine.

Management of Overdosage: There is no experience to date with deliberate overdosage. Up to 640 mg/day have been given to patients with pathological hypersecretory conditions with no serious adverse effects. In the event of overdosage, treatment should be symptomatic and supportive. Unabsorbed material should be removed from the gastrointestinal tract, the patient should be monitored, and supportive therapy should be employed.

Dosage and Administration: Duodenal Ulcer: The recommended adult oral dosage for active duodenal ulcer is 40 mg h.s.; most patients heal within 4 weeks, and it is rarely necessary to use the full dosage for longer than 6 to 8 weeks. A regimen of 20 mg b.i.d. is also effective. For maintenance therapy, the recommended oral dosage is 20 mg h.s.

Benign Gastric Ulcer: The recommended adult oral dosage for active benign gastric ulcer is 40 mg h.s.

Pathological Hypersecretory Conditions (e.g., Zollinger-Ellison Syndrome, Multiple Endocrine Adenomas): The dosage varies with the individual patient; the recommended adult oral starting dosage is 20 mg q8h, but some patients may require a higher starting dosage. Dosages should be adjusted to individual patient needs and continued as long as clinically indicated: up to 160 mg q8h have been administered to some patients with severe Zollinger-Ellison syndrome.

Oral Suspension: The oral suspension may be substituted for tablets.

Directions for Preparing PEPCID Oral Suspension: Prepare suspension at time of dispensing. Slowly add 46 mL Purified Water. Shake vigorously for 5 to 10 seconds immediately after adding the water and immediately before use.

Stability of PEPCID Oral Suspension: Unused constituted oral suspension should be discarded after 30 days.

Intravenous Administration: In some hospitalized patients with pathological hypersecretory conditions or intractable ulcers or in patients who are unable to take oral medication, the recommended intravenous dosage is 20 mg q12h. For preparation of intravenous solutions for injection or infusion and for compatible diluents, please see Prescribing Information. Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration whenever solution and container permit.

Concomitant Use of Antacids: Antacids may be given concomitantly if needed.

Dosage Adjustment for Patients with Severe Renal Insufficiency: In patients with severe renal insufficiency (creatinine clearance less than 10 mL/min), the elimination half-life of famotidine may exceed 20 hours, reaching approximately 24 hours in anuric patients. Although no relationship of adverse effects to high plasma levels has been established, to avoid excess accumulation of the drug, the dosage may be reduced to 20 mg h.s. or the dosing interval may be prolonged to 36 to 48 hours as indicated by the patient's clinical response.

How Supplied: Tablets, containing 20 mg or 40 mg famotidine, with hydroxypropyl cellulose, hydroxypropyl methylcellulose, iron oxides, magnesium stearate, microcrystalline cellulose, starch, talc, and titanium dioxide as inactive ingredients, in unit-of-use bottles of 30 and unit-dose packages of 100. Oral Suspension, containing 40 mg famotidine per 5 mL, after constitution with 46 mL Purified Water, with citric acid, flavors, microcrystalline cellulose and carboxymethylcellulose sodium, sucrose, and xanthan gum as inactive ingredients, and sodium benzoate 0.1%, sodium metabisulfite 0.1%, and sodium propylparaben 0.02% as preservatives, in bottles of 400 mg famotidine for constitution; Solution for intravenous injection, containing 10 mg famotidine per mL, with L-aspartic acid 4 mg, mannitol 20 mg, and Water for Injection q.s. 1 mL as inactive ingredients, and benzyl alcohol 0.9% added as preservative to the multidose vials, as 10x2-mL single-dose vials and as 4-mL vials.

For more detailed information, consult your M.D. Representative or see Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, PA 19486