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BRONCHITIS

To the Editor:

I read with interest the thoughtful literature review of trials of antibiotics in acute bronchitis by Orr et al.¹ The six articles reviewed, including one of which I was the primary author,² gave conflicting results regarding the efficacy of antibiotic therapy.

I believe these conflicting results occurred because acute bronchitis is a symptom complex rather than a disease. Viral upper respiratory infections, sinusitis, allergic or vasomotor rhinitis, and asthma all cause cough with sputum production. The antibiotic trials reviewed, including my own, generally did not adequately differentiate these diagnoses, and therefore conflicting results were obtained.

Despite these limitations, I think some tentative conclusions can be drawn. Four of the trials³⁻⁶ showed no advantage of antibiotics over placebo. The other two^{2,7} (my study included) showed that antibiotics resulted in somewhat more rapid improvement in symptoms but did not show the dramatic effect one would expect in a true bacterial infection.

This supports the conclusion that most cases of "acute bronchitis" are eventually self-limited and that antibiotic treatment is generally not indicated. If a patient continues to cough, then studies to diagnose the cause of the cough should be pursued. I suggest that the direction of future research be to guide clinicians in how to best investigate these patients. For example, one recent article⁸ showed a high incidence of bronchospasm in patients with acute bronchitis. Future studies such as this will be more helpful than further antibiotic trials.

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OSTEOPATHY vs CHIROPRACTIC

To the Editor:

I read with interest and great surprise the article by Curtis and Bove¹ on chiropractors and back pain and the subsequent letters to the editor.² I am an osteopathic physician, board certified in both family practice and osteopathic manipulative medicine by the American Osteopathic Association; I am also a member of the AAFP. A number of points from these articles are disturbing. They include:

1. The manner in which chiropractic and osteopathic medicine have been generally equated by both the family physician and chiropractic authors
2. The misunderstanding that manual medicine is used as "replacement care" for systemic illness, as opposed to "adjunctive care" for systemic illness
3. The lack of involvement of osteopathic physicians and the osteopathic literature in both the references used for the original article and in the RAND Expert Study Panel, which listed guidelines for spinal manipulation.

No one is served when we lump osteopathic services in the same category as chiropractic services. Patients especially are at risk of being misinformed that chiropractors do the same thing as osteopathic physicians or that osteopathic manipulation is the same thing as chiropractic manipulation. The difference is so fundamental to the basic issues expressed in these articles, I am surprised it was not pointed out sooner.

As physicians, we are all concerned about the total care of our patients and that they receive the best treatment that modern medicine has to offer. Osteopathic physicians are fully licensed physicians and surgeons offering manipulative medicine in combination with traditional medical treatments. In fact, most osteopathic manipulation is provided by osteopathic family physicians as part of total patient care. The issue of manipulation as replacement therapy is one directed at the chiropractic and not the osteopathic profession. This point, I believe, is the basis for the recent surge of interest in manipulative medicine by allopathic physicians practicing general, family, or internal medicine and conservative orthopedics. Manipulation offers a safe and effective alternative for adjunctive treatment of musculoskeletal pain, which can also be a very important practice builder for the physician.

I teach osteopathic manipulation through CME courses, both in conjunction with Michigan State University College of Osteopathic Medicine and privately in both my local area and abroad. The number of allopathic physicians that I teach continues to rise, and the success with which these physicians have integrated manual medicine into their practices should really not be a surprise even in areas involving nonmusculoskeletal problems.

The art of palpatory diagnosis and hands-on treatment is not a new one, nor is it restricted to the osteopathic or chiropractic professions. Long ago, before we had the help of diagnostic instruments and laboratory analysis, these palpatory skills were much more highly regarded and refined by practitioners of medicine. For example, the use of palpation to distinguish the differential diagnosis of abdominal pain is still a skill that is highly regarded in the medical profes-

sion. There are many documented referred pain patterns that give clues to visceral illness in a patient's presentation; in addition, osteopathic literature documents reflex points that correlate with specific visceral illnesses when tenderness to palpation is elicited over these points. External cephalic version for breech presentation, percussion and postural drainage for cystic fibrosis, and even CPR procedures are all uses of manual medicine in nonmusculoskeletal illness. There is even an old osteopathic technique for opening the eustachian tube for treating congestive disorders of the upper respiratory tract.

I maintain that the use of manipulative medicine as adjunctive therapy in nonmusculoskeletal conditions should not be unscientifically received or perceived as a threat to the scope of practice of a family physician. On the contrary, it should be perceived as adjunctive treatment that is an extension of already accepted hands-on procedures in medicine. There does exist extensive research supporting the physiological basis of manipulative medicine in both musculoskeletal and nonmusculoskeletal problems. There is no time or space in this format to detail these studies, but I am including some references.³⁻⁵

There is one additional point that distinguishes osteopathic physicians from chiropractors. That is, the osteopathic use of manipulation includes many different types of techniques that do not all carry the same precautions as the high-velocity, low-amplitude (thrust) technique. Current osteopathic education includes a primary focus on nonthrusting techniques at all of the schools of osteopathic medicine. This allows the osteopathic physician to use effective manipulative interventions for conditions in which patient tolerance or risk might preclude the risk of a high-velocity, low-amplitude thrust technique. The differences between osteopathic medicine and chiropractic are fundamental issues around which physicians' needs and concerns should be directed more clearly. Guidelines for proper administration of osteopathic manipulation are not the same as those for chiropractic manipulation. The authors of this article and the organizers of the RAND Expert Panel on Manipulation have made a severe oversight in not considering these distinctions. I believe osteopathic physicians and allopathic physicians, especially family physicians, should work more closely to establish appropriate guide-

lines for physician-based certification in and practice standards for manipulative medicine.

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COLONOSCOPY

To the Editor:

I would like to congratulate Dr Rodney and colleagues for their informative and scholarly work (*Rodney WM, Dabov G, Orientale E, Reeves WP. Sedation associated with a more complete colonoscopy. J Fam Pract* 1993; 36:394-400). This study is an example of a hands-on evolution from flexible sigmoidoscopy to total colonoscopy.

I would like to share a few comments that reflect a variation in the methods used during colonoscopy. I find these variations important with respect to cost containment. Because they are expensive bowel preparations, we no longer use electrolyte purge solutions such as Golytely or Colyte. Patients complain not only of the cost, but of the large volume that needs to be consumed. As an alternative, magnesium citrate is less costly, and smaller amounts are required for an effective bowel preparation. For those patients who are unable to tolerate magnesium citrate because of its bitter taste, I suggest that they mix it with apple juice, orange juice, or some type of vegetable juice. During the summer months, I recommend that they have it

“on the rocks.” In contrast, cherry-flavored magnesium citrate produces an interesting problem. During colonoscopy, in patients who have taken this preparation, it is difficult to distinguish between bowel fluid and blood. Therefore, it would be difficult to identify bleeding from a proximal colon cancer or bleeding from a polypectomized site.

I ask my patients to drink a bottle of magnesium citrate at 6 AM and another bottle at 7 AM on the day of the procedure, followed by clear liquids. This circumvents the need for an overnight fast. In order to ensure a clean colon, all patients undergo a 1000-mL plain, intermittent water enema in the office before the procedure. Since I treat mostly a working population, we perform total colonoscopy on weekdays, weekends, and holidays at 1 PM. Using this strategy, we have not had to stop a colonoscopy procedure because of an incomplete bowel preparation. The patients prefer this arrangement, and it is difficult for the competition to duplicate.

Along similar lines, we no longer use diazepam. Instead, we rely on meperidine exclusively. The usual dose is between 75 and 100 mg, with lesser amounts required for elderly patients. Diazepam and other benzodiazepine derivatives are costly, add little in terms of sedation, and have a shorter shelf life than meperidine. More important, meperidine has a safety factor in that it can be reversed with naloxone hydrochloride, if needed.

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To the Editor:

The review article by Rodney et al (*Rodney WM, Dabov G, Orientale E, Reeves WP. Sedation associated with a more complete colonoscopy. J Fam Pract* 1993; 36:394-400) on the effect of sedation on completing colonoscopy to the cecum was the added incentive I needed to write this letter. My stimulus to begin looking beyond 60 cm was purchasing a 130-cm videoscope when I graduated from back-breaking private image fiberoptic flexible sigmoidoscopy. I simply continued beyond the nebulous 60-cm barrier in the well-prepped, tolerant patient. To my amazement, I found that this was not a formidable task! When a gastroenterologist “retired” to our small coastal Maine community, it was not long until I was doing full colon examinations and polypectomy “on purpose,” using parenteral

sedation and analgesia. I would like to pass on several of the impressions developed over the years of my experience that may interest you.

1. I used Golytely early on and felt that it was a good prep, but came to find that Fleets II with a 24-hour prep (after reduction to liquid diet for 3 days if possible) was much better tolerated by the patient, less expensive, at least as effective in clearing the colon, and without the occasional dilemma of fluid overload in the elderly.

2. I placed an IV route (prn adapter with three-way stopcock) in all patients, but did not use premedication. I found that one third of patients required no IV sedation/analgesia and that the remaining two thirds were just as effectively treated by giving the medication when its necessity was determined during the procedure (usually in the sigmoid turn). This frequency of patients not requiring sedation curiously corresponds with the 31% reach-the-cecum rate you describe in the 38 nonsedated patients in your series.

3. It is becoming obvious that the risks of colonoscopy without sedation (perforation, bleeding) are greatest in negotiating the sigmoid turn. The additional risks are those of the sedatives or analgesics, and can be minimized by judicious use of only what is necessary for patient comfort, and adequately monitoring tissue oxygenation. Family physicians are at least as competent as gastroenterologists to prepare for and provide cardiopulmonary support if required.

4. The adenomas and the cancers that follow are at *any location* beyond the cecum. Unfortunately, fewer and fewer of them are hanging out in that distal 60 cm. This is a disease like no other non-skin cancer—one in which early diagnosis can inexpensively prevent profound morbidity and mortality. We should redouble our effort to make substantial inroads into educating our family practice graduates in the skill of colonoscopy.

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The preceding letters were referred to Dr Rodney, who responds as follows:

Family physicians who have taken part in the various GI endoscopy demonstration projects have derived professional satisfaction from increasingly positive results.¹⁻³ New studies indicate that endoscopic methods are the most effective

ones for colorectal cancer screening and case finding.⁴⁻⁷

For the first time, the Surveillance, Epidemiology, and End Results (SEER) project of the National Cancer Institute has detected a demonstrable decrease in the incidence of colorectal cancer. In my opinion, this is directly attributable to the teaching of flexible sigmoidoscopy and short colonoscopy in primary care training programs. Family practice has a lot to be proud of in that this specialty was at the vanguard of this important reform.

Many more improvements are coming down the pipeline. The technology of tertiary care is rapidly being transferred to primary care. Accessibility is improved for patients, cost is reduced, and many of the techniques are relatively less invasive.

Of course, the greatest tragedy is the continued outright discrimination directed against family physicians by the credentialing process of many hospitals. It is common knowledge that many family practice residency programs are literally forbidden to teach colonoscopy and upper-GI endoscopy. Any specialty that cannot provide its own training and monitor its own privileges will wither.

I urge family physicians everywhere to demand a "bill of rights" that guarantees that residency training programs and all qualified family physicians will receive hospital privileges based on training, experience, and/or proven ability. This situation currently does not exist in many family practice residency training programs.¹ These reforms are vital to the study of new ideas and methods as described by Dr Godreau. My compliments to him for adding this important skill to his practice of family medicine.

In reference to the second letter, Dr Tyler is yet another example of a family physician using previously established flexible sigmoidoscopy skills to advance to colonoscopy. Stories like his must be placed in the medical literature before qualified family physicians can universally obtain the hospital privileges to which they are entitled. In too many communities, specialists are exercising a credentials veto against family practice. The American Academy of Family Physicians (AAFP) has called for the retraction of these materials.⁸

Recently the American Society for Gastrointestinal Endoscopy (ASGE) mass-mailed training guidelines and a legal opinion that suggests that the experience of physicians like Dr Tyler is not sufficient. A recent article suggests that

100 supervised colonoscopies are necessary to achieve technical competence.⁹ This study suffers from the usual blend of tertiary care bias, patient selection bias, and arbitrary definition of competence (defined as a 90% reach-the-cecum rate). This study was based on seven gastroenterology fellows and five fourth-year surgery residents in their first year of endoscopic training. In Memphis, one set of gastroenterologists have already suggested that this be the new credentialing standard. We have previously described a different and more reasonable approach.¹⁰

Bowel preparation is an art and a science. Physicians respond to different clinical situations by using different bowel preparations. For example, bowel preparation for a patient with suspected colitis is contraindicated. By definition, the patient with active diarrhea is in a state of colonic hypermotility. On the other hand, frail elderly patients require a different approach. As we examined the preliminary data, we were surprised to find the superiority of a balanced electrolyte purge solution. We have found it to be well tolerated by our patients. Furthermore, we have found few patients who actually comply with a clear liquid diet for more than 24 hours. In our community, the cost of the preparation is approximately \$20, and it is covered by Medicaid.

Dr Tyler's technique of using sedation and analgesia as needed highlights the unique advantage family physicians can exercise in the performance of these endoscopic procedures. Having a good ongoing relationship with your patient means that you are more likely to understand his or her tolerance of pain, and all of the other psychosocial issues that affect the patient. This is another reason why family physicians are most likely to provide high quality, lower cost, and more accessible endoscopic services to their patients.

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HYPOTHYROIDISM

To the Editor:

When a patient comes for consultation complaining of cold intolerance, loss of energy, dry skin and hair, the diagnosis of hypothyroidism can be made easily. Sometimes, however, thyroid deficiency may present in unusual ways.

A 55-year-old male patient complained of a 3-month history of changes in his voice. He reported slurred, imprecise speech, slowed speech rate, slowed body movements, hyponasality "as if he had a cold," and a low-pitched voice. He further added that his dentist stated that his "tongue got in the way" during teeth cleaning. He denied any problem swallowing or chewing, alteration of consciousness, headaches, or dizziness. There was no history of familial neurologic disease.

The neurological examination showed an alert well-developed man. The lateral portions of the eyebrows were thinned, the skin was dry. The deep tendon reflexes showed a delayed relaxation

phase. Intellect, muscle strength, sensation, coordination, and cranial nerve examination were normal.

He had mild dysarthria and lingual articulatory imprecision on diadochokinesis. Speech intelligibility was considered to be fair to good. A deep, low-pitched vocal quality with mild hyponasal resonance was observed in addition to reduced speech rate and rhythm. A mildly reduced speech breathing pattern upon sustained phonation was also observed.

His thyroid stimulating hormone was >100 mU/L. His T4 level was <1.0 µg/dL (5 to 12 µg/dL) and his T3 was 48 ng/dL (80 to 220 ng/dL).

After 5 months of treatment with levothyroxine, the patient stated that all of the problems with his speech and voice had disappeared. He had much more energy at his job. Comparison of the pre- and post-treatment audio tapes showed evident changes in the patient's pitch and resonance, with a higher, better pitched vocal quality, increased speech rate and rhythm, and improved oral and nasal resonance. Articulatory precision on diadochokinesis and speech breathing had improved to normal limits.

The voice in hypothyroidism is characteristically hoarse, sometimes described as coarse or "gravelly," and low pitched. This results from infiltration of the vocal folds with myxomatous material resulting in edema and tissue swelling.^{1,2}

It is of interest that an otolaryngologist, Sir Felix Semon,³ was one of the first clinicians to note a relationship between myxedema and the thyroid gland. Bicknell⁴ reported 27 patients presenting to the ear, nose, and throat department with vocal problems. He noted that the most common complaint was a weak voice. Other symptoms included difficulty in singing, a strain in talking, and comments by relatives and friends on the patient's deeper voice. A few complained of a hoarse voice. Bicknell stated that in his series, direct questioning rarely elicited any other symptoms of hypothyroidism, except for a feeling of tiredness and shortness of breath. Prognosis following treatment was excellent.

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MIGRAINE

To the Editor:

I enjoyed reading the recent article on migraine.¹ Before sumatriptan is prescribed for the patient with migraine, however, a trial of diphenhydramine should be administered.

Sedation is the major limitation of the classic H₁ receptor antagonists, owing to the H₁ blocker binding to the H₁ receptor and possibly antagonizing histamine released by histaminergic neurons.² This limitation, however, can be used advantageously in a child or adult with migraine, as sleep is desirable and may ameliorate an attack. An atopic patient may have migraines, since migraine may affect 5% of the population, and allergy is not uncommon both in patients and their families.³ Antihistamines are used both symptomatically and prophylactically (eg, cyproheptadine) in the treatment of migraine.^{4,5} The use of antihistamines as a group is indicated by the local tissue inflammatory reaction due to chemicals found around the dilated superficial artery at the site of migraine (believed to be responsible for headache pain).⁶ Before prescribing an antihistamine, however, the physician should recommend a trial of diphenhydramine; diphenhydramine's availability over the counter not only makes it less expensive but also promotes independence and self-management. Provided no contraindication exists (eg, glaucoma or seizures), diphenhydramine (25 to 50 mg) is given with acetylsalicylic acid (if an adult), acetaminophen, or ibuprofen as soon as possible after the onset of headache and repeated in 3 to 4 hours, if needed. The patient should be warned of the soporific effect of diphenhydramine, cautioned not to drive, and told that sleep may relieve an attack. If the headache persists after the second dose of diphenhydramine and acetylsalicylic acid, acetaminophen, or ibuprofen, a prescription antihistamine (eg, promethazine) should be used with acetylsalicylic acid or

acetaminophen; or a barbiturate-acetylsalicylic-acid-caffeine preparation should be used if attacks are infrequent, and further diphenhydramine should not be taken for that attack. If prescription antihistamine is needed (eg, promethazine) with acetylsalicylic acid (if an adult) or acetaminophen, the medications should be repeated once in several hours, if needed. In addition to inducing sleep, diphenhydramine is safe, nonaddicting, and has anticholinergic side effects that discourage excessive use.

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The preceding letter was referred to Dr Cady, who responds as follows:

I appreciate Dr Hoffman's response to the article "Recent Advances in Migraine Management." As Dr Hoffman pointed out, diphenhydramine can be useful both as a primary and adjunctive migraine therapy. It can cause significant sedation, which may be therapeutic for some migraineurs, but only serves to extend the disability of a migraine attack for others.

It was pointed out in the article that therapeutic intervention with drugs such as sumatriptan can minimize migraine disability. In approximately three quarters of moderate to severe migraine at-

tacks, individuals returned to normal or near normal levels of function within 1 hour. The authors believe that the specificity of sumatriptan for the 5-HT₁ receptor system accounts for this action. It is believed that one of the recent advances in migraine is the ability to target pharmacologic therapy specifically at the migraine mechanism rather than symptom control, thereby limiting migraine disability.

While antihistamines such as diphenhydramine can relieve nausea and perhaps interrupt certain aspects of the vascular inflammatory response associated with migraine, their mechanism is likely nonspecific. The sedation and impairment of cognitive function common with diphenhydramine limits its usefulness. Many 5-HT₁ agonists such as sumatriptan allow for the relief of migraine while preserving normal function. It is believed that this represents a recent advance in migraine therapy.

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