This new section of the journal is designed to present clinical problems which focus on patient management, problem-solving, and other elements integral to family medicine. It features reinforcement of major teaching points through further discussion and supplemental references which appear on the following page.

Self-Assessment in Family Practice

These materials have been prepared by members of the Self-Assessment Panel of *The Journal of Family Practice*. Membership: R. Neil Chisholm, MD, Chairman (University of Colorado, Denver), B. Lewis Barnett, MD (Medical University of South Carolina, Charleston), Paul C. Brucker, MD (Thomas Jefferson University Hospital, Philadelphia, Pennsylvania), Laurel G. Case, MD (University of Oregon Medical School, Portland), Ian R. Hill, MD (Plains Health Centre, Regina, Saskatchewan), Kenneth F. Kessell, MD (MacNeal Memorial Hospital, Berwyn, Illinois), John A. Lincoln, MD (University of Washington, Seattle), Richard C. Reynolds, MD (University of Florida, Gainesville), Gabriel Smilkstein, MD (University of California, Davis), William L. Stewart, MD (Southern Illinois University, Springfield.)

The following is a patient management problem. After reading the stem, you should answer each question sequentially. One or more answers may be correct for each question. After you have answered each question, and before going to the next, you should turn to the answer page and review the responses to your choices while covering the answers to the next question. Repeat this process until all five questions have been answered.

A 29-year-old married male, who is a new patient, comes to your office complaining of intermittent epigastric pain of two months' duration. He is not a very good historian and cannot tell you whether or not there is any particular association of the pain with meals or relief from eating. However, he does recall that the pain has awakened him several times in the early morning.

1. The next thing that you would do would be to:
   A. Order an upper GI series.
   B. Perform a physical examination.
   C. Prescribe an ulcer diet and antacids.
   D. Inquire about the patient's marital relationship.
   E. Inquire about the nature of his employment and his job satisfaction.

2. Following this, you would:
   A. Order an upper GI series.
   B. Perform a physical examination.
   C. Obtain a hematocrit.
   D. Examine a stool specimen for occult blood.
   E. Advise the patient to find another job.

3. With this information in hand, you would now:
   A. Order an upper GI series.
   B. Order an overnight acid secretion test.
   C. Order a histamine test.
   D. Order a serum amylase.
   E. Admit the patient to the hospital.

4. After this, you would:
   A. Prescribe an ulcer diet.
   B. Advise frequent small feedings.
   C. Prescribe an anticholinergic drug.
   D. Advise the patient to use any antacid that he finds palatable.
   E. Prescribe a specific antacid.

5. You would now:
   A. Refer the patient to a psychiatrist.
   B. Request that the patient and his wife come to your office for counseling.
   C. Advise the patient to seek other employment.
   D. Order another upper GI series in three weeks.
   E. Discharge the patient when he is free of symptoms.

The next clinical situation is followed by four multiple choice questions with only one correct answer for each. Answer all questions before turning to the answer page to assess your responses.

A 59-year-old housewife presents with increasing fatigability over 1½ years, together with extreme myalgia involving the upper and lower limbs and a 50-lb weight loss over the past year. For two months, the patient had complained of right temporal, pounding headaches with tenderness in the area of the temple. A blood pressure recorded in January 1975 was reported as normal in the left arm, but was unobtainable in the same arm three months later.

6. The most likely diagnosis is:
   A. Pancoast tumour
   B. Multiple sclerosis
   C. Giant cell arteritis
   D. Glioma of temporal lobe
   E. Subclavian steal syndrome

7. The most likely laboratory findings are:
   A. Elevated WBC
   B. Elevated serum creatine phosphokinase
   C. Normal ESR
   D. Elevated protein in C.S.F.
   E. None of the above

8. The diagnosis can be confirmed by:
   A. Pneumoencephalogram
   B. Temporal artery biopsy with serial sectioning
   C. Muscle biopsy
   D. Upper GI

9. Treatment is:
   A. Oral steroids
   B. ASA and physiotherapy
   C. Supportive
   D. Imuran

Answers:

1.

A. Incorrect. You have not yet obtained a complete history, particularly in the psychosocial sphere.

B. Incorrect. You should obtain a more complete history before performing a physical examination.

C. Incorrect. Treatment should not be prescribed prior to the establishment of a diagnosis.

D. Correct. The symptoms are suggestive of a peptic ulcer. Many individuals with this disease have frustrations that seem to be causally related.[1] In this particular case, the patient and his wife have a great deal of conflict centered around his wife's continuing to work and her desire to postpone starting a family.

E. Correct. See "D" above. The patient is very unhappy in his job as a traveling salesman with a feed supply company. This necessitates his being away from home frequently. He also has trouble relating to his immediate superior.

2.

A. Incorrect. You should examine the patient prior to ordering diagnostic studies.

B. Correct. No explanation necessary.

C. Correct. A hematocrit should be performed to ascertain whether or not there has been any significant loss of blood from the gastrointestinal tract.

D. Correct. See "C" above.

E. Incorrect. It is premature to make any such suggestion to the patient.

3.

A. Correct. The upper GI series shows a small ulcer crater in the first portion of the duodenum.

B. Incorrect. Gastric analysis is generally unnecessary in patients with a typical duodenal ulcer unless one suspects Zollinger-Ellison Syndrome.[2]

C. Incorrect. See "B" above.

D. Incorrect. A serum amylasis is only of value in the diagnosis of acute pancreatitis. The duration of the patient's symptoms militate against this diagnosis.

E. Incorrect. The severity of the patient's symptoms do not warrant this action. Diagnosis and treatment can adequately be performed on an ambulatory basis without loss of time from work.

4.

A. Incorrect. Controlled observations indicate that there is no clear-cut therapeutic effect of diet therapy.[2]

B. Correct. Frequent small feedings do relieve the symptoms of peptic ulcer.[2]

C. Incorrect. The doses necessary to produce the desired gastric action also have undesirable systemic effects.[2] Furthermore, there is no good evidence that these agents actually accelerate the healing of a duodenal ulcer.[2]

D. Incorrect. There is a tremendous difference between in vivo and in vitro ability of the various commercially available antacids to neutralize hydrochloric acid.[3]

E. Correct. See "D" above.

5.

A. Incorrect. You have not yet demonstrated that the patient's psychopathology is severe enough to warrant such a course of action. This is likely to be interpreted as rejection by the patient. Psychotherapy has no proven beneficial effect on the healing or recurrence of duodenal ulcer.[2] In fact, intensive psychotherapy during phases of acute activity of a duodenal ulcer is probably contraindicated, because it may result in exacerbations.[2]

B. Correct. A warm and sympathetic attitude on the part of the physician, reassurance, and support are important aspects of the care of the ulcer patient.[2] The family physician should be in the best position to counsel the husband and wife concerning their marital problem.

C. Incorrect. This type of action is seldom warranted. The patient must be assisted in working through the various alternatives. In the final analysis, however, he must make his own decisions.

D. Incorrect. Most duodenal ulcers take from several weeks to months to heal.[2] If the patient is improving clinically with a radiologically proven duodenal ulcer, a repeat GI series is not usually required.

E. Incorrect. 50 to 95 percent of duodenal ulcers will recur in five years. Active therapy should be continued for 2 to 3 months in all patients. Furthermore, patients should be informed of the recurrence rate and told to return at the first sign of recurrent symptoms.

References:

1. Kirsner JB: The stomach. In Sodeman WA (ed): Pathologic Physiology: Mechanisms of Disease. Philadelphia, W B Saunders, 1974, pp 722-729
2. Silen W: Peptic ulcer. In Harrison TR (ed): Principles of Internal Medicine. ed 6. New York, McGraw-Hill, 1970, vol 2, pp 1431-1456
3. Fordtran JS, Morawski SG, Richardson CT: In vivo and in vitro evaluation of liquid antacids. N Engl J Med 288:923-928, 1973

Answers:

6. C, 7. E, 8. B, 9. A

Giant Cell Arteritis

Giant cell arteritis is not an uncommon disorder but is frequently overlooked for several reasons. Firstly, the constitutional manifestations are often vague, non-specific, and identifiable with many other disorders, including functional problems. Secondly, the local changes it induces through obliterative arteritis, such as a stroke or coronary occlusion, are commonly regarded as primary, local phenomena, and not part of a systemic disorder. Thirdly, there are no "typical" laboratory changes. Fourthly, the vascular changes may be segmental and easily missed in a random biopsy. Fifthly, the highest incidence is in the older age group, and it is easy to make the mistake of regarding the patient's complaints as personal and situational in origin, or due to degenerative, neoplastic or infectious disease.

It is now evident that polymyalgia rheumatica is frequently part of the clinical spectrum of giant cell arteritis. It may dominate all the other manifestations of arteritis.

Too often, giant cell arteritis is thought of in terms of temporal arteritis, and only then if the patient gives a pointed history and if there are local physical indications of an active arteritis.

While one should biopsy an artery which is deemed most likely to show abnormal changes, either due to its location or its physical changes, many times a positive biopsy is obtained from vessels which clinically appear normal. The histological changes are highly segmental and therefore easily missed, hence, the need for serial sectioning of the specimen.

The treatment of choice is an initial dosage of prednisone, 40-50 mg per day, to prevent a disabling or fatal blow to the patient, even though in general the course is relatively benign.

References:

1. Anderson LG, Bayles TB: Polymyalgia rheumatica and giant cell arteritis. DM, January, 1974, pp. 1-36
2. Hamilton CR, Shelley WM, Tumulty PA: Giant cell arteritis: Including temporal arteritis and polymyalgia rheumatica. Medicine 50:1-27, 1971