

# Self-Assessment in Family Practice

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This section of the Journal is designed to present clinical problems which focus on patient management, problem solving, and other elements integral to family medicine. The intent of this section is aimed more at teaching and learning than self-assessment as an evaluation or scoring device. Reinforcement of major teaching points is therefore included through the further discussion and supplemental references which appear on the following pages. Critical comments relating to these self-assessment materials are invited and should be submitted as Letters to the Editor.

**Directions: Choose the one best answer (A, B, C, D, or E).**

1. Exercise rehabilitation following a myocardial infarction is beneficial to most patients with coronary heart disease when closely monitored by the physician. Which of the following statements is *not* true?

- A. Training pulse rates should be kept below 75 to 80 percent of the maximum heart rate
- B. Dynamic muscle contraction is preferred over static contraction
- C. Motivation is more easily accomplished in a group setting
- D. The rehabilitation program should begin immediately on discharge from the hospital
- E. Physical exercise has a beneficial effect on emotional mood

2. Anatomic and cellular changes accompanying normal aging in the cardiovascular system produce

- A. increased heart rate

- B. cardiac output which remains the same
- C. increased peripheral resistance
- D. circulation time which remains the same
- E. increased stroke volume

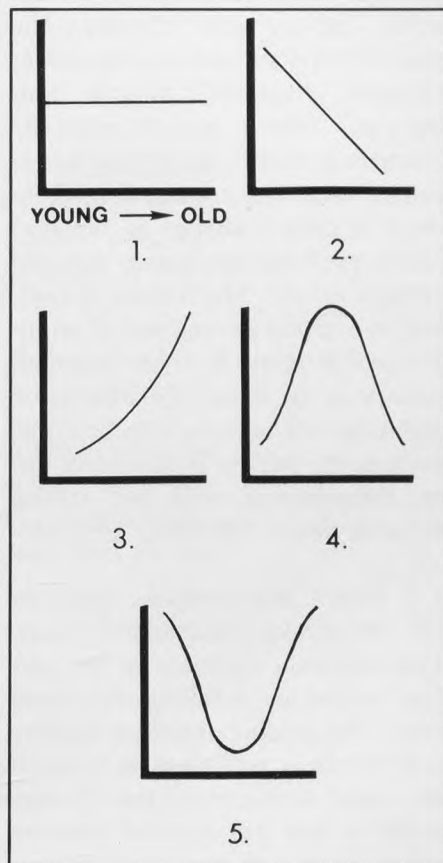
3. Common complications of vasectomies include all of the following *except*

- A. increased incidence of impotence
- B. scrotal ecchymoses and swelling
- C. epididymitis or epididymo-orchitis
- D. hematomas
- E. sperm granuloma

4. Compliance with therapeutic regimens involves several important areas, but generally *not*

- A. complexity of regimens
- B. patient psychological responses
- C. family and community influences
- D. knowledge of patient about disease rate
- E. consistency in instructions and promotion of compliance

5. Match the following diagrammatic representations with the appropriate answer.



- A. \_\_\_ Leg amputation
- B. \_\_\_ Coronary artery disease
- C. \_\_\_ Duodenal ulcers
- D. \_\_\_ Catarrhal child syndromes
- E. \_\_\_ Acute wheezy chest

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## Answers and Discussion

1.D. Exercise improves the extraction of oxygen from the myocardium and has a beneficial effect on hypertriglyceridemia, glucose intolerance, and hypertension. Activity also improves the state of mind and aids in relaxation. Dynamic (isotonic) muscle contraction, where muscle actually changes in length, is preferred over static (isometric) contraction where there is only a change in tension. Static exercise can cause reduced venous return. Motivation is optimal in a group setting and if an individual program is to be designed, variety is an asset. Rehabilitation planning and activity can begin as soon as the patient is pain-free, has no arrhythmias, and the resting pulse is under 100 beats per minute.<sup>1</sup>

2.C. Heart rate remains constant but the stroke volume decreases. This causes a decrease in the cardiac output and a fall in circulation time. The cardiac output of healthy individuals is sufficient to support the usual activities of the elderly, but it is not sufficient to tolerate either severe or prolonged stress. Therefore, surgery, infection, trauma, blood loss, or exertion can precipitate heart failure in an individual who has no previous cardiac history. Many elderly patients require digitalization during an acute illness to prevent heart failure.<sup>2</sup>

3.A. Common minor complications are those which occur in more than one percent of men having bilateral vasectomies for sterilization. These complications include discoloration of scrotal skin and superficial swelling (over 50 percent of patients), moderate to severe pain for 24 to 48 hours (15 percent), vasitis (3 percent), epididymitis or epididymo-orchitis (5 percent), hematomas (10 percent), and sperm granulomas (2.5 percent). The procedure itself does nothing to the erection and ejaculation mechanism, but about 1.3 percent of patients will complain of impotence after vasectomy. Further evaluation has revealed that all men who report postvasectomy impotence had some problems with impotence preoperatively.<sup>3</sup>

4.D. The origins of noncompliance are much more complicated than the simple sociodemographic or personality trait hypotheses imply. Recent evidence has demonstrated that although knowledge about the disease and about the importance of adherence to a medical schedule is helpful in initiating treatment, such knowledge does not affect the continuing problem of compliance. Regimen complexity and negative sociocultural influences can be effectively countered by patient education. The physician must be consistent and firm in his instruc-

tion and demands for the patient to cooperate in his own care.<sup>4</sup>

5.A.1., B.3., C.4., D.2., E.5. One of the greatest opportunities in family practice is to be able to follow persons suffering from disease over many years. Displaying diagrammatically the five possible forms of outcome of disease will both help physicians manage patients better and help them gain some insight into long-term research possibilities.<sup>5</sup>

### References

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