so that the cost of VDRL screening for women was a $7 laboratory charge plus a $5 charge for blood drawing and handling? This would reduce costs by $15 per visit with no clinical loss whatsoever. Total savings would be $4.5 million, or 53% of the total assumed costs of yearly screening. Cost per case of syphilis identified would then be reduced to about $113,700 in round numbers. This is not an outrageous amount and using Dr Haskell's worst case method the screening would then appear to be cost-effective.

I would conclude, therefore, that rather than discontinue VDRL premarital screening, we should eliminate physician visits and fees which have no place in the screening procedure. I would still eliminate rubella screening and instead substitute documentation of vaccination. We could save even more money if costs for the screening were fixed. This could be accomplished by regionalizing laboratories performing screening on a competitive bid basis and either fixing clinic blood-drawing fees or similarly regionalizing sites where blood specimens for screening were to be drawn.

This seems to me to be a classical case of one potential pitfall in cost-benefit analyses—much depends on the assumptions inherent in the calculation process.

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REFERENCES

1. Haskell RJ: A cost-benefit analysis of California's mandatory premarital screening program for syphilis (Medicine and Government). West J Med 1984 Oct; 141:538-541

2. Scott RM, Schydlower M, Lampe RM, et al: The immunoglobulin response to reimmunization with rubella vaccine. J Pediatr 1981 Oct; 99:531-534

3. Robinson RG, Dudenhoeffer FE, Holroyd HJ, et al: Rubella immunity in older children, teenagers, and young adults: A comparison of immunity in those previously immunized with those unimmunized. J Pediatr 1982 Aug; 101:188-191

4. Rubella vaccination during pregnancy—United States, 1971-1983. MMWR 1984 Jul 6; 33:365-373

Break Dancer's Fracture of the Fifth Metatarsal

TO THE EDITOR: Recently, break dancing has become a very popular form of entertainment in the United States. Break dancing involves expressive gestures of the head, arms and body while using steps designed to produce a fluid appearance of movement, periodically punctuated by back spins on the arched upper thoracic spine. As with any new activity, it is not surprising that previously uncommon injuries should become manifested with increased frequency. I would like to report one such break dancing-related injury.

A 17-year-old young man in good health presented to the emergency room complaining of the sudden onset of sharp pain on the lateral aspect of his right foot, which was coincident with the premature planting of this foot while performing a lateral slide step. (This is a common maneuver in break dancing, in which the undersurface of the shoe is kept just above and parallel to the floor or street while moving laterally, after which weight is gradually shifted to that foot.) On physical examination minimal swelling and moderate point tenderness were noted just proximal to the fifth metatarsal-phalangeal joint along the lateral aspect of the right foot. Ankle and foot radiographs showed a normal ankle and a spiral fracture of the distal midshaft of the fifth metatarsal.

Four types of fractures of the fifth metatarsal occur with any frequency. These include stress fractures in athletes,[1] and tuberosity and Jones's fractures[2] related to the tendinous insertion of the peroneus brevis—all three of which occur at the proximal end of the metatarsal. Fractures of the midshaft and neck are usually transverse and due to heavy objects falling on the foot.[1]

Given the position and direction of motion during the lateral slide step during break dancing, the spiral midshaft fracture suffered by this patient likely resulted from the combination of a rotational force about the long axis of the foot plus a medial load on the distal half of the metatarsal. This is similar to the direction of force in an inversion sprain of the ankle, but with a more distal focus of maximal force.

With the increasing popularity of break dancing among American youths, certain previously uncommon injuries can be expected to be seen with greater frequency, including fractures in unusual locations. Physicians should have a heightened level of suspicion when evaluating patients injured during break dancing until all associated injuries are known.

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REFERENCES

1. Rogers LF: Radiology of Skeletal Trauma. New York, Churchill-Livingstone, 1982, pp 898-914

2. Connolly JF: DePalma's The Management of Fractures and Dislocations, 3rd Ed. Philadelphia, WB Saunders, 1981, pp 2058-2069

Methods of Determining Blood Pressure

TO THE EDITOR: I read with interest the article on auscultatory blood pressure measurement by Drs Londe and Klitzner[1] in the August issue.

Although I have noticed few other people who use the technique that I use in auscultating brachial blood pressures, I personally use the bell of the stethoscope as recommended by DeGowin and DeGowin in their text *Bedside Diagnostic Examination.*[2] On page 387 of the third edition, their recommendation is "press the bell of the stethoscope lightly over the brachial artery and note the pressure read at which sounds first become audible . . . " I assume that the DeGowins presumed the findings of the study by Londe and Klitzner and therefore recommended this technique as the preferable way of eliciting blood pressures. I do not know why most people use the diaphragm of the stethoscope and would be interested in the authors' feelings about the DeGowins' method of determining blood pressures. Perhaps comparing assessment of blood pressure with a bell applied lightly to the brachial artery versus a diaphragm could be the subject of a study.

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REFERENCES

1. Londe S, Klitzner TS: Auscultatory blood pressure measurement—Effect of pressure on the head of the stethoscope (Clinical Investigation). West J Med 1984 Aug; 141:193-195

2. DeGowin EL, DeGowin RL: Bedside Diagnostic Examination—3rd Ed. New York, Macmillan Publishing Co, Inc, 1976

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Dr Londe Replies

TO THE EDITOR: Dr Meth raises an important question.

I have been using the bell side of the stethoscope because I was using a bell stethoscope when I began my studies in