Statistically significant graded association existed between increasing lifetime intake of caffeinated coffee and decreasing BMD at both the hip and spine, independent of age, obesity, parity, years since menopause, and the use of tobacco, alcohol, estrogen, thiazides, and calcium supplements. Bone density did not vary by lifetime coffee intake in women who reported drinking at least one glass of milk per day during most of their adult lives.

The authors conlude that lifetime caffeinated coffee intake equivalent to two cups a day is associated with decreased bone density in older women who do not drink milk on a daily basis.

Barrett-Connor E, Chang JC, Edelstein SL: Coffee-associated osteoporosis offset by daily milk consumption. *JAMA* 1994;271:280-283.

Penicillin allergy and radioallergosorbent testing

The authors examined the prevalence of patients supposedly allergic to penicillin who have a positive response to the radioallergosorbent test (RAST) for penicillin G or V. They also evaluated the predictive power of family physicians' clinical judgment that a patient who is supposedly allergic to penicillin will have a positive RAST result.

This study involved 97 adult patients with supposed allergy to penicillin from 11 primary care practices in Newfoundland. Ninety-two of the patients underwent the RAST. They helped physicians complete a questionnaire and had a venous blood sample taken for the RAST. Physicians examined the clinical history and judged whether the patient was likely to have a positive RAST result.

Of the 92 patients, 8 had a positive RAST result and 84 a negative one. The positive predictive power of a "good" clinical history (for example, urticaria; swollen eyes, tongue, or lips; or an anaphylactic reaction witnessed by a physician) was low (10%). The negative predictive power of a "poor" clinical history (for example, nausea, vomiting, diarrhea, fever, nonspecific rash, or fainting) was 92%.

Less than 10% of primary care patients with a supposed allergy to penicillin will have a positive RAST result. In addition, physicians' predictions of allergy in such patients are imprecise.

Worrall GJ, Hull C, Briffett E: Radioallergosorbent testing for penicillin allergy in family practice. *Can Med Assoc J* 1994;150:37-41.

Effect of autologous blood transfusion on infectious complications after colorectal cancer surgery

Homologous blood transfusion has been associated with an increased risk of postoperative infectious complications. To test the clinical consequences of this apparently immunosuppressive effect of homologous blood in a controlled trial, the authors designed a study in which the control group deposited autologous blood before their operations for use should transfusion be needed.

They enrolled 120 patients with apparently curable colorectal cancer who were able to predeposit autologous blood. Fifty-eight patients were assigned to receive homologous blood if blood transfusion were needed during the operation, and the other 62, to receive their own predeposited blood followed, if necessary, by homologous blood.

Despite the similarity between the groups in factors known to affect the risk of postoperative infections, there was a significant difference in postoperative infection rate between the two groups. The rates of noninfectious complications were similar.

Probably because their preoperative blood depositing caused the patients receiving autologous blood to have lower hemoglobin concentrations, they were more likely to require transfusion than was the group receiving homologous blood.

This study shows the clinical potential of blood-transfusion–mediated immunomodulation, which may be important also in tumor immunology.

Heiss MM, Mempel W, Jauch K-W, et al: Beneficial effect of autologous blood transfusion on infectious complications after colorectal cancer surgery. *Lancet* 1993; 342:1328-1333. ◆