



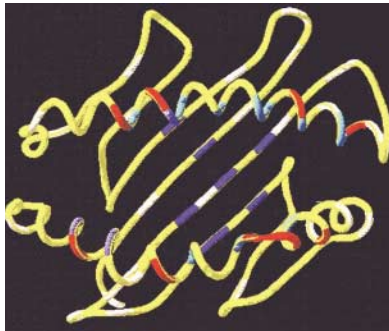
### Oral Contraceptives and the Risk of Myocardial Infarction

Some studies have indicated that women who take oral contraceptives have an increased risk of myocardial infarction. This study focused specifically on second- and third-generation oral contraceptives. The risk of myocardial infarction was significantly increased by the use of second-generation pills; the findings regarding the use of third-generation pills were inconclusive but suggested that the risk was lower than that with second-generation pills.

*This study suggests that the use of third-generation oral contraceptives is associated with a lower risk of myocardial infarction than is the use of other oral contraceptives and may not increase the risk at all. However, women who smoke and take oral contraceptives greatly increase their risk of myocardial infarction.*

see page 1787 (editorial, page 1841)

### Major-Histocompatibility-Complex Class I Alleles and Antigens in Hematopoietic-Cell Transplantation

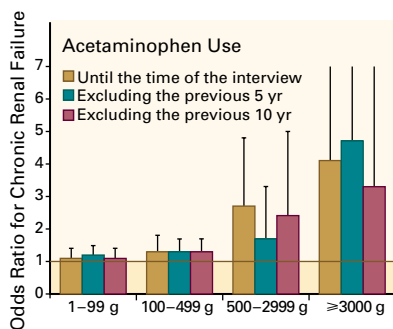


Serotyping is typically used to define HLA class I antigens during the selection of donors for bone marrow transplantation. Some HLA variants, however, are identifiable only by DNA sequencing of the allele (allele typing). Among more than 450 patients who received marrow transplants from unrelated donors, antigen mismatches were more predictive of graft rejection than allele mismatches.

*Numerous HLA alleles encode HLA molecules that evoke alloantibodies, but others are serologically silent and can be detected only by DNA sequencing. The value of DNA typing in predicting graft rejection has been unproved. This rigorously conducted study found that serotyping is superior to DNA typing for the selection of an unrelated bone marrow donor. The results have broad practical and theoretical implications in the field of transplantation.*

see page 1794 (editorial, page 1842)

### Acetaminophen, Aspirin, and Chronic Renal Failure

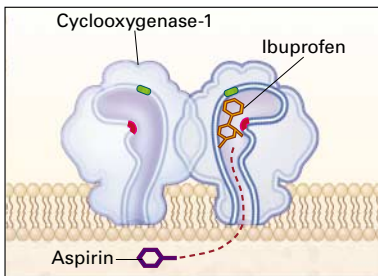


Epidemiologic studies have linked the use of nonnarcotic analgesics with the development of chronic renal failure, yet whether this relation is causal has been unclear. This nationwide, population-based, case-control study of early-stage chronic renal insufficiency in Sweden found that the regular use of either aspirin or acetaminophen increases the risk of chronic renal failure by a factor of 2.5.

*Acetaminophen and aspirin appear to have exacerbating effects on chronic renal failure from virtually any cause, although bias due to the use of analgesics for symptoms related to predisposing conditions cannot be ruled out.*

see page 1801 (editorial, page 1844)

## Cyclooxygenase Inhibitors and the Antiplatelet Effects of Aspirin



The antiplatelet effects of aspirin are caused by the irreversible inhibition of the activity of the enzyme cyclooxygenase. In contrast, non-steroidal antiinflammatory drugs (NSAIDs) are reversible inhibitors of this activity and have only transient effects on platelet function. This study found that pretreatment with ibuprofen before the administration of aspirin blocked the antiplatelet effects of aspirin. Neither the cyclooxygenase-2 inhibitor rofecoxib nor acetaminophen had this blocking effect.

*The clinical implication of these findings is that the concurrent administration of an NSAID, such as ibuprofen, and aspirin may attenuate the cardioprotective effect of aspirin. The findings are important because it is not uncommon for the drugs to be used together.*

see page 1809 (editorial, page 1844)



## Clinical Practice: What Vitamins Should Patients Be Taking?

A healthy 54-year-old woman comes for a routine examination and asks whether she should be taking any vitamin supplements. What do you advise? This article reviews the evidence that supports or fails to support the use of any of several common vitamin supplements for the prevention of disease.

see page 1819

*“In many cases, the subjective reports are out of proportion to . . . sleep-laboratory findings.”*

## Current Concepts: Sleep Disturbances in the Wake of Traumatic Events

In the wake of traumatic events, subjective reports of sleep disturbance are common. This review article examines both subjectively identified and objectively confirmed sleep disorders after traumatic events. Recommendations with respect to diagnostic procedures and therapeutic options are also reviewed.

see page 1825 (editorial, page 1846)