

# From the Library

"Ford stalled the operation until early July. After coming home from Good Samaritan Hospital, he sat in his darkened bedroom well into that fall, unable to read, watch television, or work. He had little else to do but brood over his future, meditate over his past, and seek solace from his religious faith. Although the operation went as well as could have been expected, Ford was left with permanent visual impairment to his vision in his left eye. According to Olive Carey, he was told not to take off the bandage and he got fed up with it and took it off too soon. That's why one eye went blind. But he could see more with that one eye than a lot of people could with four. For the rest of his life, he wore a patch over his blurred left eye usually under his thick dark glasses. He had to read by holding a book just a few inches from his face. Sometimes he would lift up the patch to read, as a way of avoiding the disorienting effect of looking only through one eye or sometimes because the "good" eye was not working properly. In a sense, however, Ford enjoyed wearing the eye patch, for it gave him a piratical look that enhanced his forbidding image. (Joseph McBride. *Searching for John Ford. A Life*. New York: Saint Martin's Press, 2001:534-5)

Several laboratories have identified that GABA type A receptor as the primary site of action for anaesthetics in the central nervous system. GABA or  $\gamma$ -aminobutyric acid is the brain's major inhibitory neural transmitter. Scientists recently have deleted a single amino acid from the protein in a single area of the receptor site and rendered the cell unresponsive to anaesthetic agents. If the GABA-A receptor site is the major player in anaesthetic actions, understanding its functions could lead to the development of safer anaesthetic agents. (*Scientific American* 2002;**286**:24)

The acceptance of routine vaccine administration in many countries has been diminished by the notion that they are associated with increased risk of seizures. Routine hepatitis B vaccination of newborns is recommended. Opposition to this recommendation has come from patient advocate groups that worry about the possibility of the vaccine leading to seizures. Now a prospective clinical study undertaken in San Francisco examined 3302 infants who were vaccinated within 21 days of birth. This study failed to find any evidence that newborn hepatitis B vaccination is associated

with an increase in the number of febrile seizures, sepsis evaluations, or neurological evaluations. The routine vaccination of newborns with hepatitis B would seem prudent. (*Pediatric Infectious Disease Journal* 2001;**20**:1049-54)

Many health benefits of routine aerobic exercise have been reported. In adults endurance athletes develop a superior blood lipid profile compared to normal people. A recent study of young distance runners suggests that this does not occur in younger athletes. In this study of 54 athletes the blood lipid profiles were similar to those of youths in a general population. (*Medicine in Science and Sports and Exercise* 2001;**33**:1661-6)

Investigators at the University of California at Irvine have recently reported findings that suggest that a drug used to treat people with high stress levels can help restore memory loss secondary to brain damage. In this study lesions were induced in the hippocampus of rats. The rats were then treated with the drug metyrapone after which they were able to perform maze memory tests at a much more efficient level. The hippocampus is frequently damaged in neurodegenerative diseases, stroke, hypoxia, and illnesses related to stress. Whether the use of metyrapone will enhance the memory of patients with damage to this portion of the brain has yet to be determined. (*JAMA* 2002;**287**:443)

The epidemic of cardiac disease continues in the Western world. Efforts to address this public health problem include methods to reduce cholesterol levels. Existing cholesterol reducing treatments include dietary restriction of total cholesterol intake or the long term use of drugs such as statins or fibrates to lower low density lipoprotein (LDL) or niacin to increase high density lipoprotein (HDL). None of these drugs is entirely successful in addressing the problem and even in combination they are better at lowering LDL than raising HDL. Now, Avant Immunotherapeutics in Needham, Massachusetts, is developing a vaccine to raise HDL. In rabbits their CETi-1 vaccine raised HDL by 42%, lowered LDL by 24%, and reduced the area of atherosclerotic lesions by 40% in experimental rabbits. Avant has completed human safety studies and is now in phase 2 clinical trials to determine the optimal vaccine dose for patients. (*Scientific American* 2002;**286**:32-3)

In the past the congenital rubella embryopathy syndrome was a significant cause of visual impairment. Over the past two decades congenital rubella has been reduced significantly in most Western nations. A recent study from the National Center of Infectious Diseases in Atlanta, Georgia, suggests that the United States is on the verge of eliminating this disease. Most cases of rubella that occur in the United States now occur among Hispanics, particularly those born in countries where rubella vaccination programmes do not exist or were recently implemented. Providing rubella vaccination for legal and illegal immigrants of Hispanic origin may play an important part in the goal of eliminating rubella from the United States. (*JAMA* 2002;**287**:455-72)

Classic teaching holds that cognitive functions remain relatively unimpaired in multiple sclerosis. Regrettably, this now appears to be in error. In a 10 year follow up study of patients with multiple sclerosis, investigators from Italy have demonstrated that cognitive dysfunction is likely to emerge and progress in a sizeable proportion of patients. As multiple sclerosis advances neurological and cognitive involvement tend to converge. Most importantly, limitations in a patient's work and social activities are likely to be correlated with the extent of cognitive decline and are independent of the degree of physical disability. (*Archives of Neurology* 2001; **58**:1602-6)

If public health efforts to address the epidemic of obesity were as effective as those addressing tobacco consumption most public health officials would be overjoyed. In examining how one convinces people not to smoke investigators from the University of Missouri have shown that employees in a workplace with smoking bans have a much higher rate of smoking cessation than employees where smoking is permitted. Relapses are similar between these two groups of employees. These findings obviously have importance not only in understanding how to continue the trend towards cessation of smoking but also in the alteration of other personal habits that have adverse public health effects. (*Tobacco Control* 2001;**10**:267-72)