The theme for this year’s scientific session was “Controversies in Medicine,” and a variety of topics were covered. On the first morning Michael S. Mega MD, from University of California, Los Angeles, spoke on the treatment of stroke and on the cause and treatment of Alzheimer’s disease. He was followed by Eliseo J. Perez-Stable MD, University of California, San Francisco, who addressed cholesterol testing and cancer screening.

Dr Mega noted that the best treatment for stroke is prevention, and when stroke does occur, it should be regarded as an acute emergency. For maximum benefit, therapy should be initiated within two hours of the onset of symptoms. Treatment centers should establish emergency stroke teams to handle these patients. The goals of initial treatment are to optimize cerebral perfusion, oxygenation and metabolism, to stabilize blood pressure and to normalize blood glucose. Language abnormality indicates large vessel disease. Thrombolysis and carotid endarterectomy were discussed. Blood pressure control should not be too strict, especially in those with a prior history of hypertension, to avoid loss of cerebral perfusion. Hyperglycemia indicates a poor prognosis; blood sugar should be maintained at 100-200 mg %. Patients need to be followed closely for brain edema (peak incidence on days 3 to 5) and treated promptly with mannitol and hyperventilation. Steroids should not be used. Dr Mega also described biochemical changes, particularly involving calcium and glutamate. Ongoing research in this area should lead to new treatments.

Next Dr Mega discussed the differential diagnosis of Alzheimer’s disease and other dementia syndromes, particularly vascular dementias. All involve cognitive decline. In vascular dementia there are focal neurological deficits, whereas in Alzheimer’s motor impairment occurs only late in the disease. Behavioral abnormalities are the usual reason for Alzheimer’s patients to need nursing home care. Causation and treatment of Alzheimer’s disease are the focus of ongoing research. One issue is whether or not amyloid is causally related to this disorder. Neurochemical changes in brain cells are similar to those in stroke. It is hoped that research in this area will lead to treatment and prevention of Alzheimer’s. At the present time Tacrine is the only FDA-approved drug. FDA looks only at cognitive changes in assessing treatment effectiveness. Researchers at UCLA consider both cognitive and behavioral changes and are exploring other treatment options.

Next Dr Perez-Stable discussed cholesterol screening and the use of cholesterol-lowering diets and drugs. Total cholesterol, LDL and HDL should be measured. Triglycerides are not a separate risk factor and are important only if LDL is elevated. Diet modification is the first line of treatment. Drug therapy should be reserved for those at highest risk (coronary or atherosclerotic heart disease, men age 45 to 75, women age 35 to 75) who do not respond to diet change alone. After age 70 aggressive cholesterol lowering is probably not necessary unless coronary heart disease is present. Other risk factors to be considered are family history of early coronary heart disease, tobacco use, and hypertension. Niacin lowers LDL and raises HDL. In post-menopausal women estrogen also does both. The statins primarily lower LDL; psyllium lowers only LDL.

With respect to cancer screening, Dr Perez-Stable noted that effective screening requires that the number of false-positives with a particular test be low and that early detection reduces the risk of death from the cancer. There have been few randomized screening trials. Screening is more valuable for groups with a high incidence of a cancer, eg, screening smokers for oral cancer or early mammography for women with a family history of breast cancer. Early treatment of cervical cancer results in 90% survival. A Pap smear every three years is adequate except for women at high risk, and there is no need for Pap smears after age 65. Early diagnosis of breast cancer also reduces mortality; a clinical breast exam should be done annually from age 40 and mammography every 1 to 2 years from age 50. For both men and women, stools should be tested for occult blood annually from age 50, and sigmoidoscopy done every 5 to 10 years. Not recommended are chest x-ray or sputum cytology for lung cancer, ultrasound for ovarian cancer, mammography before age 40, and PSA for prostate cancer.

On the second morning we heard about laparoscopic surgery from Bradley Wong MD, the medical and surgical treatment of coronary artery disease from Irwin Schatz MD, antiviral therapy in the HIV-positive patient, and the care of patients with fatal illness by Donald Northfelt MD, of University of California San Francisco.

According to Dr Wong, the use of laparoscopy has increased rapidly since the first cholecystectomy in 1987 and is now being used for many other procedures. In general, use of laparoscopic technique can decrease pain and shorten hospital stays, reducing costs. However, longer operative and anesthesia time, more complications, and the need for expensive equipment increases costs. Accepted procedures for the general surgeon with average skills are cholecystectomy, appendix, and diagnostic laparoscopy, gastroscopy, and jejunostomy. Procedures requiring more skill are bile-duct exploration, patching of perforating ulcer, biliary/gastric bypass, small bowel resection, colectomy, rectal prolapse, splenectomy, and adrenalectomy. Additional procedures now are being developed in this rapidly evolving field.

Dr Schatz discussed the decision-making process for determining whether to treat the patient with coronary artery disease medically or surgically. A great deal of information exists, but there have been no controlled studies comparing coronary artery bypass graft (CABG) and angioplasty or medical treatment. In addition to assessment of the individual patient (age, level of risk for future cardiovascular events, presence or absence of symptoms, history of previous infarction, which vessels are involved, etc), it is necessary to know the experience, skill level, and track record of the surgeon or cardiologist to whom the patient might be referred for invasive treatment. In general there is little data to indicate that angioplasty or CABG is really superior to medical treatment in low risk patients.
For patients at moderate risk, CABG prolongs survival in those with left main coronary artery disease or involvement of three vessels with reduced injection fraction. For high-risk patients, CABG prolongs survival, but in the elderly the complications are increased. Angioplasty may be preferable to CABG in this group, but good data are not available. Complications of CABG include myocardial infarction in 5% to 10%, cognitive impairment (which usually clears up) in 75%, and strokes in 5% to 8% of those 70 or older. Survival is improved with the use of mammary arteries in grafting instead of saphenous veins. Intensive medical treatment with changes in life style and clinical risk factors can reverse coronary artery disease and may be an alternative for some patients.

According to Dr Northfelt, the drugs currently available for HIV disease can delay the onset of symptoms and opportunistic infections; however, they do not prolong survival very much. Combinations of antiviral drugs may be more effective than the use of single drugs. All of the available drugs are highly toxic and many patients are unable to tolerate them. There is evidence that giving AZT intravenously to infected pregnant women does reduce the risk of transmission of the virus to the infant at the time of delivery. The Centers for Disease Control (CDC) now recommends this practice. Meanwhile new drugs are being developed and, it is hoped, they will produce better results for more HIV-infected patients.

Dr Northfelt discussed caring for patients with fatal illnesses saying the patient and the family need to be involved in planning the care. The goal should be to reduce suffering, which patients usually fear more than death, and improve the quality of remaining life. Particularly important are the control of pain (“The dose that works is the dose that works...No dose of morphine should be regarded as too much”) and dyspnea (narcotics are useful here, too.) Hospice care, preferably at home, should be made available. Hospital requirements for resuscitation are inhumane, and patients and families need to be told this. They should be told that, even if there is no possibility of cure, suffering can be relieved. The families that want to force nutrition and hydration on dying patients need to be told that this may increase suffering. Uremic death, for instance, is painless. Narcotics should be given as needed, and the family should be told that the patient will just go to sleep and that any restlessness they observe is not uncomfortable. Dr Northfelt expressed the opinion that euthanasia should never be allowed and that assisted suicide should not be considered unless suffering is intolerable and intractable and the competent patient requests it consistently.

The topic for the final morning was native Hawaiian health care. A panel composed of Fern Clark RN, Stanford Manua Esq, Kahuna Laau Lapaaau Helen Walrath, Kakoo Leilani Hayes, and Drs Wayne Fukino, Ed Morgan, Steve Moser, and Terry Shintani discussed traditional Hawaiian concepts of health and illness and native healing practices. The ancient Hawaiians were thin, strong and healthy people; unfortunately, today native Hawaiians have the highest rates in the U.S. for death from heart disease, cancer, stroke, and diabetes. In 1988 the U.S. Congress passed the Native Hawaiian Health Care Act to address the problems in a culturally sensitive way. There are now native Hawaiian health care programs on all islands. Through promotion of healthier life styles, return to the traditional Hawaiian diet, and collaboration with native healers, changes in the grim health statistics have begun; some participants have lost weight, lowered their blood pressure, and diabetics have reduced or eliminated their need for insulin.