Federal Health Matters

Researchers Aim to Regenerate Human Tissue

Private sector and military research teams have joined forces, with the Soldier Treatment and Regeneration Consortium, to explore the clinical applications of progressive cell therapies in order to treat many of the injuries sustained by soldiers returning from Iraq and Afghanistan. While over 90% of those wounded are surviving their injuries, many are left with severe burns and, according to the DoD, as many as 6% of the soldiers wounded in Iraq have required amputations.

The Consortium, which recently received $1 million in funding from the government, aims to regenerate tissue outside the human body in order to grow back lost limbs and treat burns, and even hopes to create a fully functioning finger within the next five years. Partners in the alliance include the Pittsburgh Tissue Engineering Initiative, Pittsburgh, PA; U.S. Army Institute of Surgical Research, Fort Sam Houston, TX; Walter Reed Army Medical Center, Washington, DC; and Wake Forest Institute for Regenerative Medicine, Winston-Salem, NC.

Currently, researchers are investigating an extracellular matrix scaffold derived from a pig's urinary bladder that holds all of the functional and structural proteins, which serve as the framework for tissues and organs among species. When implanted, the scaffold promotes the formation of site-specific tissue rather than scar tissue after injury. Anthony Atala, MD, director of the Wake Forest partner, told the Associated Press that the key will be learning how to combine smaller tissues to form something larger, such as a finger or an ear.

Telephone Calls Improve Smoking Cessation Rates

Approximately 35% of veterans are smokers, and since smoking remains the leading cause of preventable death in the United States, researchers at the Minneapolis VA Medical Center, Minneapolis, MN, along with the University of Minnesota Medical School, Minneapolis, conducted a prospective, randomized trial to investigate the role of telephone counseling in a patient's overall smoking cessation effort. They found that smokers who received telephone support were more successful than those who received help as part of routine medical care.

Authors of the study, which was published in a recent issue of the *Archives of Internal Medicine*, observed daily smokers who received care at five VA medical centers and were committed to quitting within one month. Patients were divided into two groups: (1) the standard care group, which consisted of 417 participants who had continued access to smoking cessation programs and received self-help materials in the mail, and (2) the telephone care group, which consisted of 420 participants who had seven counseling sessions (by telephone) over a two-month period and had smoking cessation medications mailed directly to their homes.

At three-month follow-up, approximately 40% of participants in the telephone care group reported not smoking during the previous seven days or more, compared to about 10% of those in the standard care group. At one-year follow-up, those percentages jumped to 40% and 22%, respectively, with 13% of participants in the telephone care group and about 4% in the standard care group reporting they had abstained from smoking for a period of six months. Additionally, compared to the standard care group, patients who received telephone care made more attempts to quit and were more likely to use other smoking cessation techniques, such as counseling programs and medication.

Problems Arise with AHLTA

The DoD's electronic medical record keeping system, Armed Forces Health Longitudinal Technology Application (AHLTA), was designed to increase efficiency, but many health care professionals are instead experiencing reduced patient access and lengthened workdays. In fact, physicians are finding that it takes longer to document information in AHLTA than when they used paper, resulting in a decrease in the number of patients a physician can see per day. At Wilford Hall Medical Center at Lackland Air Force Base, San Antonio, TX, for example, the dermatology clinic had treated an average of 1,800 patients per month, but since the installment of AHLTA, that number has dropped to 1,200.

Top administrators of AHLTA admit that the system is slow both in retrieving and storing patient data and in moving between screens. Lt. Col. Gregory Marinkovich, MD, the new system's chief of architecture and integration for clinical information technology, explains that AHLTA currently is set up as a "single threaded" system, meaning that a user must finish one transaction before beginning another. By September, however, system changes will allow "multithreading," which should cut computer delays in half and alleviate the current problems. ●