Patient’s stem cells harvested, transplanted into jaw

By Fred Michmershuizen, Online Editor

Dr. Ivan Ho, a Southern California-based dentist and founder of Platinum Dental, recently performed a concentrated stem cell transplant for one of his patients in need of implants. The innovative procedure, called a bone marrow aspirate concentration (BMAC), is reported to be the first on the West Coast and only the second performed in the United States.

Ho harvested and transplanted stem cells from the patient’s own bone marrow into his jawbone to create a dense bone structure to which a dental implant can later be permanently set. The procedure was conducted on March 25 at Platinum Dental in Rancho Santa Margarita, Calif.

The process involved the har-
vesting of the stem cells through a small incision in the hip bone of the patient, Jason Morgan, on the morning of the procedure. Using a centrifuge, Ho isolated and concentrated Morgan’s stem cells from the plasma, transplanted them into his jaw and then added an allograft.

During a telephone interview with Dental Tribune after the procedure, Ho explained that the stem cells will work with the surrounding tissue to eventually generate healthy, dense bone tissue to which the dental implant can be permanently attached.

The ultimate goal with this procedure, Ho explained, is to find better, new ways of growing bone. “The stem cells should allow for better quality bone growth and better healing,” he said.

Stem cells have been used for many years by neurosurgeons and orthopedic surgeons to generate bone for procedures such as spinal and thia fusions. Now, Ho is applying the stem cell transplant procedure to dental applications to provide an option for patients who may not have previously been candidates for a tooth implant because of poor jawbone density.

Ho described the outpatient procedure as minimally invasive and relatively painless, and said that it takes between one and three hours to perform. He added that it provides faster healing, less pain and better results than other implant procedures.

“This minimally invasive procedure is an innovative, advanced long-term alternative to existing tooth replacement options such as dentures, bridges and even traditional bone grafting procedures,” Ho said. “In addition to providing better and faster healing, the transplantation of the patient’s own stem cells enables the body to increase bone growth in the jaw through angiogenesis to permanently support the dental implant. Because the use of dentures and bridges carry a high risk of problems in many cases — resulting in gum disease, tooth decay and the loss of viable teeth — additional costly surgical procedures are necessary. Dental implants are the most natural solution and provide the best long-term results.”

For more than 18 years, Ho has been practicing dentistry out of his Platinum Dental offices in California. He has been described as a pioneer in improving the present state of dentistry, primarily by using the most sophisticated, patient-friendly ways of delivering advanced dental care. Ho received his degree in dentistry from the University of Southern California and is a member of more than 10 professional dental societies. He achieved diplomate status from the International Congress of Oral Implantology, graduated from the MISCH Implant Institute, and received mastership training at the Las Vegas Institute (LVI) for Advanced Dental Studies.

Ho is also a Fellow in the American Academy of Implant Dentistry. He offers the latest technology to his patients, and he is one of the few dentists in Orange County, Calif., to offer the PRP (platelet rich plasma) procedure.

Platinum Dental, with two locations in South Orange County, Calif., is a dental practice consisting of a team of highly trained and skilled clinicians devoted to restoring and enhancing the natural beauty of smiles using state-of-the-art procedures. Platinum Dental provides comprehensive treatment planning and uses restorative and cosmetic dentistry to achieve optimal dental health for its patients. For more information, visit www.platinum-dental.net.