

THE AMERICAN VETERAN
JANUARY 2007 EDITION

SEGMENT TITLE: BIONIC FOOT

JENNIFER BRADEN, HOST: LOSS OF LIMB IS ANOTHER TYPE OF INJURY SUFFERED IN THE WAR ON TERROR AND MANY VETERANS ARE ADJUSTING TO LIFE AS AN AMPUTEE. HIGH TECH HAS NOW STEPPED INTO THE PICTURE AND VETERANS OF ALL AGES ARE BENEFITTING. DOING YARD WORK IS SOMETHING AL PERDEW DOESN'T TAKE FOR GRANTED. A SOMEWHAT SIMPLE TASK MEANS THE WORLD TO HIM.

AL PERDEW, MARINE CORPS VETERAN: JANUARY OF '79 THEY SAID I WOULD NEVER WALK OR NEVER PRODUCE A CHILD.

BRADEN: A HORRIBLE CAR WRECK LEFT THE MARINE CORPS VETERAN PARALYZED FROM THE NECK DOWN. HERMAN HOSPITAL IN HOUSTON RECOMMENDED THAT AL GET TREATED AT THE V.A. HOSPITAL'S SPINAL CORD UNIT.

PERDEW: STAFF, THE THERAPIST AND EVERYTHING SUPPORTING, GOD'S WILL, SIX MONTHS LATER I WALKED OUT OF THERE.

BRADEN: AND THE MICHAEL E. DEBAKEY V.A. MEDICAL CENTER IN HOUSTON HAS BEEN WITH AL EVERY STEP OF THE WAY. IN 2005 HE HAD A RISKY SURGERY TO FIX SEVERE NERVE DAMAGE TO HIS FOOT.

PERDEW: I'M A SPINAL CORD PATIENT. I HAVE RESIDUAL DAMAGE. NEUROGENIC BLADDER, OTHER ISSUES. I LIVE IN CHRONIC NEUROLOGICAL PAIN EVERY DAY.

BRADEN: DOCTORS EVENTUALLY HAD TO AMPUTATE AL'S FOOT. HE USED A PROSTHESIS FOR SIX MONTHS. AND THEN, V.A. DOCTORS GAVE HIM SOMETHING NEW AND STATE OF THE ART.

PERDEW: THEY GAVE ME THE OPPORTUNITY TO HAVE THIS FOOT WITH BIONIC-LIKE TECHNOLOGY. AND WITH WHAT IT DOES IN THE MOVEMENTS THAT IT HAS AND THE WAY THAT IT "THINKS," CALIBRATES ITSELF TO MY WALK, AND IT LIFTS UP SO THAT I CAN PUT MY FOOT UNDERNEATH ME LIKE MY OTHER ANKLE TO STAND. WHEN I GO ON STAIRS, THE FIRST STEP, IT AUTOMATICALLY READS THAT I'M ON A STAIR OR A STEP AND IT LIFTS AT A GREATER ANGLE.

BRADEN: IT'S CALLED THE PROPRIO BIONIC FOOT -- A BATTERY POWERED, MICRO-CHIP CONTROLLED DEVICE.

MARK BENVENISTE, RN MICHAEL E DEBAKEY VA MEDICAL CENTER:
THIS IS A GREAT TIME TO BE IN PROSTHETICS.

BRADEN: MARK BENVENISTE IS CERTIFIED IN THE FIELD AND HAS SEEN SOME DRAMATIC CHANGES OVER THE YEARS. BENVENISTE IS WITH THE DEBAKEY MEDICAL CENTER -- ONE OF THE FIRST V.A. HOSPITALS TO FIT A PATIENT WITH THE BIONIC FOOT.

BENVENISTE: THIS FOOT HAS A MOTOR, A COMPUTER CHIP, SENSORS AND OF COURSE A BATTERY PACK TO POWER IT. AND IT SENSES THE TERRAIN AND THEN AGAIN MOVES THE TOE UP AND DOWN ACCORDING TO THE NEEDS OF THE PATIENT. MY PARTICULAR PATIENT HAS NERVE AND MUSCLE WEAKNESS. SO, THIS FOOT ALLOWS HIM TO CLEAR THE TOE WHEN HIS MUSCLES CANNOT COMPENSATE.

BRADEN: THE FOOT MODELS CAN BE MADE BY HAND OR ON THE COMPUTER.

BENVENISTE: WE CAN LOOK AT THE POSTERIOR MEDIAL AND LATERAL SIDES. A DIGITAL IMAGE OF THE LIMB GOES INTO THE COMPUTER WE CAN MODIFY IT ON THE COMPUTER, THEN WE SEND IT TO A CARVER AND THE CARVER CARVES THE MODEL AND THEN WE WILL PUT INTO A MACHINE THAT PULLS THE PLASTIC DOWN.

BRADEN: BENVENISTE SAYS ONLY CERTAIN PATIENTS CAN BE FITTED FOR THE FOOT.

BENVENISTE: AT THIS TIME, IT'S ONLY MEANT FOR BELOW THE KNEE AMPUTEES, NOT FOR THE REAL ACTIVE PATIENT.

BRADEN: AS FOR AL, HIS NEW FOOT IS A PERFECT FIT FOR HIS LIFESTYLE. HE HOPES HIS JOURNEY CAN BE AN INSPIRATION TO OTHERS IN THE SAME SITUATION.

PERDEW: THE GUYS COMING BACK FROM WAR, OR WHATEVER BE THE CASE, AMPUTEES, THEY WILL BENEFIT FROM IT. THE V.A. HAS DONE SO MUCH FOR ME, I HOPE THAT IT PROVES POSITIVE FOR OTHERS.

BRADEN: BY THE WAY AL DID HAVE CHILDREN. FIVE IN FACT AND HE HAS ONE GRANDCHILD. THE NEW BIONIC FOOT TECHNOLOGY WAS LAUNCHED IN JULY AND MANY VETERANS WILL CERTAINLY BENEFIT.

END OF VIDEO