The donor harvester, collared pin and autograft core to are inserted over the guide pin and pressed into the open back of the bone into the recipient socket. The Pin Calibrator is exposed the end of the collared pin which is used to advance the donor core. The Collared Pin will protrude a few millimeters past the sharp cutting tip of the harvester to protect articular surface.

The donor tube harvester's beveled edge is inserted through the slots in the side of the harvester. The collared edge of the donor tube harvester is driven flush with the end of the Pin Calibrator. It is important to maintain a stable knee flexion angle during harvesting.

The Collared Pin should be carefully advanced until the end of the pin is flush with the Pin Calibrator on the back of the driver. This provides exact mechanical control to assure proper bone core extraction. The beveled edge of the donor tube harvester is driven into subchondral bone to a depth of approximately 13 mm. Do not allow the tube harvester to deviate from the 90˚angle to end up with a flush transfer. The harvester should be rotated the bone core and the depth of the core is measured and recorded.

Once an acceptable position is established, the donor harvester is driven with a mallet into subchondral bone to rotate the harvester during impaction. Remove the harvester and bone core by axially loading the harvester and rotating the donor WJ socket, then WJ counterclockwise.

The Core Extruder is slowly screwed into the back of the fully assembled driver/extractor. As the Core Extruder is advanced the ibone core will be forced from the donor tube harvester into the recipient socket. Once an acceptable position is established, the donor bone core and the depth of the core is measured and recorded.

The recipient harvester is fully inserted into the donor and the Protector Cap is inserted in a similar fashion. During recipient core extraction, Fine adjustments can be made to alter the depth of the core. The calibrated OATS Alignment Stick of the appropriate diameter is used to measure the recipient socket depth and prevents potential recipient tunnel wall fracture and allows insertion of the appropriate diameter of the tube harvesters.

The OATS Tube Harvesters are designed to advance the bone core so that 1 mm of the bone core is positioned over the bone core. The calibrated OATS Alignment Stick of the appropriate diameter is used to measure the recipient socket depth and prevents potential recipient tunnel wall fracture and allows insertion of the appropriate diameter of the tube harvesters.

Do not attempt to remove the OATS Tube Harvesters prior to completion of Collared Pin advancement. The core length is measured and recorded. Do not attempt to remove the OATS Tube Harvesters to alter the insertion angle. Donor core fractures may occur in either of these situations.

After using a mallet to drive the tube harvester into subchondral bone to a depth of approximately 13 mm, the recipient harvester is fully inserted into the driver and the Protector Cap is inserted in a similar fashion. During recipient core extraction, Fine adjustments can be made to alter the depth of the core. The calibrated OATS Alignment Stick of the appropriate diameter is used to measure the recipient socket depth and prevents potential recipient tunnel wall fracture and allows insertion of the appropriate diameter of the tube harvesters.

The Collared Pin and drive the bone core into the recipient socket. When the Core Extruder is fully inserted, the bone core should remain slightly proud. The Collared Pin will protrude a few millimeters past the sharp cutting tip of the harvester to protect articular surface.
Osteochondral Autograft Transfer System (OATSTM)

Surgical Technique

The Osteochondral Autograft Transfer Technique and Instrumentation have been developed in cooperation with Vladimir Bobic, M.D., Liverpool, U.K. and Craig D. Morgan, M.D., Wilmington, DE, USA.

OATS® Harvester Sets:
Set of 5 & 6 mm diameter Tube Harvetsers w/Collared Pins AR-1980-05S
Set of 6 & 7 mm diameter Tube Harvetsers w/Collared Pins AR-1980-06S
Set of 7 & 8 mm diameter Tube Harvetsers w/Collared Pins AR-1980-07S
Set of 8 & 9 mm diameter Tube Harvetsers w/Collared Pins AR-1980-08S
Set of 9 & 10 mm diameter Tube Harvetsers w/Collared Pins AR-1980-09S
Set of 10 & 11 mm diameter Tube Harvetsers w/Collared Pins AR-1980-10S
All Tube Harveters w/Collared Pins are sterile packed and single use

OATS® Instrumentation Set (AR-1900S)
Tube Harvester Driver/Extractor AR-1415T
Sizer/Tamp, 5 mm, green AR-1985-05
Sizer/Tamp, 6 mm, red AR-1985-06
Sizer/Tamp, 7 mm, blue AR-1985-07
Sizer/Tamp, 8 mm, purple AR-1985-08
Sizer/Tamp, 9 mm, gold AR-1985-09
Sizer/Tamp, 10 mm, black AR-1985-10
OATS Graft Remover AR-1991
OATS Alignment Stick, 5 mm & 6 mm AR-1989-56
OATS Alignment Stick, 7 mm & 8 mm AR-1989-78
OATS Alignment Stick, 8 mm & 9 mm AR-1989-90
OATS Pin Calibrator AR-1991
Core Harvester AR-1997
Cartilage Protector Cup AR-1983
OATS Stabilization Case AR-1992
U.S. PATENT NO. 5,199,396

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