Overview
This surgical procedure relieves pain and corrects deformities of the wrist caused by injury, trauma, arthritis, or genetic defect. The procedure fuses the radius, the carpal and metacarpal bones.

Preparation
After anesthesia is administered, the patient is positioned so that the back of the wrist and hand are clearly visible to the surgeon. The area is cleansed and sterilized, and a tourniquet is applied.

Accessing the Wrist
An incision is made along the back of the wrist to access the joint capsule. Using special instruments, any remaining cartilage is removed from the bone ends and the bony surfaces are contoured to fit together. Misaligned bones are repositioned.

Fusing the Joints
Bone graft is placed in the joint areas between the bones. A special metal fusion plate is inserted and positioned over the radius, carpal bones and metacarpal bone of the middle finger. The plate is secured to the bone with surgical screws. The metal plate will help to keep the bones of the hand in place while they fuse together.

End of Procedure
The incision is closed and the wrist is bandaged and placed in a splint. Patients typically go home the same day after wrist fusion surgery. The patient is encouraged to keep the wrist elevated to help decrease pain and swelling. The wrist will be protected in a cast until bone fusion has occurred. Hand therapy is often required.