Vertebral Body Replacement (VBR)

Overview
This surgical procedure replaces a severely diseased or damaged vertebra with a device designed to restore the spine's proper height and alignment. The patient's pain is relieved by eliminating pressure on the spinal cord or nerve roots in the thoracic or lumbar spine.

Preparation
Anesthesia is administered, and the patient is positioned. The surgeon creates an incision on the patient's abdomen to gain access to the spine.

Removal of the Vertebra
The body of the problem vertebra is carefully removed, along with the adjoining discs.

Placing the Implant
The VBR implant is packed with bone graft material and inserted into the open space. The surgeon adjusts the height of the implant, restoring the natural height of the spine and seating the implant firmly in place between the adjacent vertebrae.

Anchoring the Vertebrae
The surgeon attaches a metal stabilization plate, or a system of plates and screws, to the remaining vertebrae. This locks the vertebrae together and keeps the implant from moving out of position.

End of Procedure and Aftercare
The incision is closed and bandaged. Over a period of several months, new bone will grow in and around the implant to create a fusion. Physical therapy may be needed.