

## **The Magic Of Surgical Debridement**

**Vikas Agashe**

P.D.Hinduja Hospital,& Dr Agashe's Maternity & Surgical Nursing Home, Mumbai ,India

The successful management of open fractures and infected non-unions is supported by 4 factors viz debridement, appropriate Antibiotics, good Skin & soft tissue cover and stabilization. The most subjective and poorly demonstrable of these is the surgical debridement. The debridement is often conservative and the reason for that is concern for creating a big defect. The surgeon then lays lot of emphasis on heavy Antibiotics and stabilization which is detrimental. The systematic, timely debridement paves way for early recovery and nature helps in healing process. For successful outcome, the debridement should be beyond injury or infection. In open fractures the debridement generally proceeds from skin to deeper structures. Distally based long flaps need to be excised but only after obtaining split thickness grafts. Contaminated fascia has to be excised. Small fascial wounds need to be enlarged. Muscles which do not contract & have pale color are excised. Superficial normal muscle may cover avascular deep muscle .. The loose Avascular bone fragments need to be excised exceptions being articular fragments. At the end of debridement for open fractures only live tissue should remain so the remaining wound can tolerate minimal bacterial load. Debridement in presence of established infection needs to be planned well with good clinical examination of proximal & distal areas, imaging with conventional Xrays, sinusograms and MRI. The previous scars, existing wounds and sinuses, presence and stability of implants ,status of bone beneath or around the implants need to be taken into consideration .Incision needs to include all the discharging sinuses and one should remember that the sinus is often a "tip of Iceberg. Last but not the least, its best to involve a plastic surgeon in planning and execution of the debridement . Several cases will be presented to demonstrate how thorough surgical debridement in infected clinical scenarios as well as non-unions has helped development of excellent callus which helped resultant union. Long term results will be shown where the bones have continued to hypertrophy and remodel over many years.