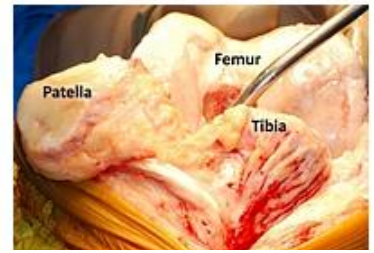


KNEE JOINT REPLACEMENTS - "Knee Arthroplasty"

Surgery

Knee is sterilized and positioned in a bended position. Cut is made through skin, fatty layer and fascia. Surgeon does not cut through any tendons. Patella is flapped out of the way, while still intact.

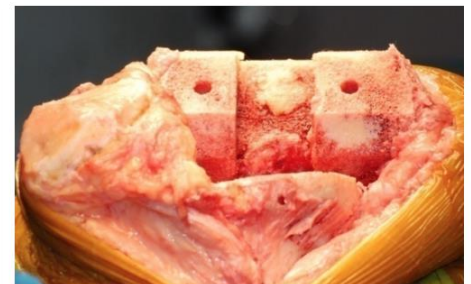
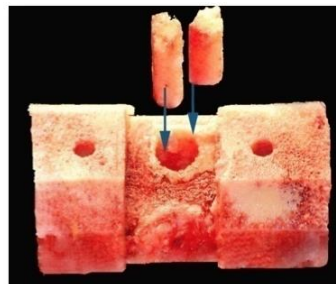


Jig sets are inserted and pinned into position - the positioning and alignment of the Jigs (guides) are of the utmost importance to ensure that the knee is balanced. Through precise measurement, the surgeon will ensure that all the angles and slopes are correct, that there are no gaps or mal-alignment. Measurement of off cuts to determine and correlate the correct sizes for the components.



Sterilized trial components are chosen from the trays according to the measurements to ensure a close fit and stable knee. The trial components are tried on the prepared bone surfaces.

After removal of the trial components, the knee is washed and dried to be prepared to receive the permanent components. A bone plug is made from the cut off bone pieces and inserted into hole which was utilized to position the jigs.



The cemented metal parts are attached to the bone by means of "bone cement" and being punched into the prepared bone surfaces. Un-cemented components are compacted into the prepared bone surfaces by a punch. The knee joint is washed and cleaned out to ensure that no debris is left behind in the knee. The patella is flapped back into position. The wound is ready to be closed.

A drain is inserted into the knee cavity to ensure all excess blood and fluids drain from the knee to reduce haematoma and swelling. The wound is carefully closed in layers. Dissolvable sutures are used to close the surrounding muscles and fascia, followed by the fatty tissue and the skin. Lastly, metal clips are inserted. The closed wound is cleaned and covered with an opsite dressing. A crêpe bandage is applied.

