

TRISMUS RELEASE AND FREE RADIAL FORE ARM FLAP

- INDICATION: - Release of a partial trismus or a complete fibrotic or bony ankylosis. Closure of a big defect of the face/cheek by preparing a free Radial Fore-arm (RF) flap with micro vascular anastomosis.
- MATERIALS NEEDED: - Gowns + gloves
- Linen for draping
- Basic Plastic Surgery Set
- Basic Maxillo Facial Surgery Set
- Preparation forceps
- Haemoclip forceps
- Vesselloops
- Micro instruments
- Extraction forceps
- Drill/saw
- Hammer and chisel
- Dermatome + blade
- Gauzes
- Diathermia, mono and bipolar
- Suction
- Ink + wooden stick
- Saline/adrenaline solution
- Heparine solution
- Syringe + small needle
- Syringe + IV needle to rinse
- Knife 10 + 15
- Sutures
- Vaseline gauze and/or parafine
- Furacine
- Cotton wool
- Crepe bandage
- EQUIPMENT: - Diathermia
- Suction unit
- Drill/saw unit
- Tourniquet (if needed)
- PREPARATION PATIENT: - The patient is lying on the back.
- The arm is on the arm table.
- DISINFECTION: - Disinfect the head with Betadine solution. Circular disinfection of the arm as high as possible and upper leg with Betadine solution.
- DRAPING: - Drape the head with a turban. The arm and the upperleg circular and the the lower leg wrapped into a towel.
- OPERATION REPORT: **Trismus part**
- Drawing the scar tissue that has to be removed.
- Injection of saline/adrenaline solution into the incision lines and the intra oral mucosa.
- Incision of the scar tissue which has to be removed.
- Preparation of a suitable artery and vein in the neck for the anasomosis.
- Intra oral release of scar tissue with a Freer and a Williger rasp.
- Extract dentition with extraction forceps if necessary.

- Osteotomy and removal of ipsilateral coronoid process with a reciprocal saw and hammer and chisel.
- If necessary release of the tendon fibers of the temporal muscle which remained attached to the ascending ramus with a Williger rasp and Freer.
- If the oral aperture is not sufficient then osteotomy and removal of contralateral coronoid process and release of the tendon fibers of the temporal muscle which remained attached to the ascending ramus.
- If there are bony bridges remove them with reciprocal saw and hammer and chisel.
- Placing of the Heister forceps.
- If there is still a trismus, inspection of the ipsilateral temporo mandibular joint (TMJ).
- High condylectomy or a high gap osteotomy of the ascending ramus with a reciprocal saw and hammer and chisel.
- Preferable interposition of soft tissue to prevent recurrence of the trismus.

Reconstructive part

- Drawing the operation plan with a wooden stick and ink.
- Incision of the flap with knife 15.
- Preparation of the skin and fascia up to the radial artery.
- Ligature on the artery of the distal site of the flap.
- Preparation of pedicle up to the elbow.
- Collateral branches can be tied up by haemoclips.
- If the pedicle is long enough place an artery forceps on the pedicle and cut the pedicle.
- The flap is free and can transported to the face.
- Rinse the pedicle of the free flap with Heparine solution.
- Model the flap into the defect of the face.
- Suture one part of the flap with the skin site into the oral mucosa.
- Suture the other part of the skin as a outer lining.
- Anastomose the artery and the vein with micro instruments and Ethilon 8-0 and 9-0 to the artery and the vein in the neck.
- Further closure of the skin.
- For closing the donor site of the Radial Fore arm flap a Split Skin Graft will be needed.
- Fatten the dermatome and the donorskin of the upperleg with the paper of a vaseline gauze or parafine and harvest the Split Skin Graft with the dermatome and put a soaked gauze with local anesthesia solution with adrenaline on the donor site.
- Put the Split Skin Graft on the donor site of the Radial Fore-arm flap and fixate it with sutures or staples.
- A tie-over bandage is necessary for good pressure during five days. Leave therefore several sutures long.
- Put a vasseline gauze on the donor skin and on top of that a unfolded Furacine gauze. Use the long sutures for fixing the package.

BANDAGE:

- Vaseline gauze and pressure bandage for the donor site of the Split Skin Graft and a pressure bandage on the donor site of the Radial Fore-arm flap.

SPECIALITIES:

- Post operative control of the free flap.