

Oral Surgery instruments

PERIOSTEAL ELEVATOR

FUNCTION:

To detach the periosteum from bone following an incision or to detach the gingival tissues from around the neck of the tooth prior to placement of extraction forceps

FEATURES:

Double ended with one round, blunted end and one pointed end

TRAY SET-UP:

Used for most surgical procedures: extractions, gingivoplasty, alveoplasty, cyst removal

CLINICAL APPLICATION:

7A wax spatula or a Woodson plastic instrument is sometimes used if a smaller periosteal elevator is desired

STRAIGHT ELEVATORS

FUNCTION:

To loosen tooth or root from bony socket prior to placement of the extraction forceps

FEATURES:

Straight handle and working end

Single rounded working end in several sizes

Often referred to by number—common sizes: 1, 34, 301

TRAY SET-UP:

Tooth and root extraction

ANGULAR ELEVATORS—CRYER

FUNCTION:

To loosen tooth or root from bony socket prior to placement of the extraction forceps

FEATURES:

Handles may be either large and straight or T-bar/crossbar design

Pointed working end in several sizes Paired, right and left

Also called a “flag” elevator

Other common designs: Potts and Crane

TRAY SET-UP:

Tooth and root extraction, impaction

ROOT TIP PICKS—ANGLED

FUNCTION:

To loosen small root fragments from bony socket

FEATURES:

Small elevator with thin, pointed, angled working end

Single or double ended

TRAY SET-UP:

Tooth and root extraction, impaction

SURGICAL CURETTES—DOUBLE ENDED/ANGULAR

FUNCTION:

To remove tissue or debris from bony sockets

FEATURES:

Spoon-shaped scraping instrument

Usually double ended and angular in several sizes

TRAY SET-UP:

Extraction, impaction, and cyst removal

CLINICAL APPLICATION:

Used following tooth extraction to ensure removal of debris and diseased tissue

NEEDLE HOLDERS

FUNCTION:

To hold suture needle

FEATURES:

Similar to hemostat but with a concave area on inside of each beak to allow for curve of suture needle

TRAY SET-UP:

Any surgical procedure involving an incision will require placement of sutures

CLINICAL APPLICATION:

To avoid needle breakage, place the needle holder on the needle just beyond the suture attachment point and at right angles to the curve of the needle

HEMOSTATS

FUNCTION:

To securely hold small items, clamp blood vessels, and remove small pieces of tooth or bone.

FEATURES:

Angled or straight with locking, scissor-like handles

Common names: Mosquito, Kelly

TRAY SET-UP:

Almost all surgical set-ups

CLINICAL APPLICATION:

Ratchet-type handles require some practice to open and close smoothly

Very versatile instrument used in all areas of dentistry

NEEDLE HOLDERS

FUNCTION:

To hold suture needle

FEATURES:

Similar to hemostat but with a concave area on inside of each beak to allow for curve of suture needle

TRAY SET-UP:

Any surgical procedure involving an incision will require placement of sutures

CLINICAL APPLICATION:

To avoid needle breakage, place the needle holder on the needle just beyond the suture attachment point and at right angles to the curve of the needle.

SUTURE

FUNCTION:

To close incision site "Stitches" hold tissues in place during healing

FEATURES:

Suture material attached to sterile stainless steel needle
Different sizes and designs of needles Suture may be absorbable—plain or chromic gut, polyglycolic acid (PGA, Vicryl) or non absorbable—silk, polyester, nylon, polypropylene
most common sizes used in dentistry (smaller number larger diameter)

CLINICAL APPLICATION:

Non absorbable sutures usually removed at 7–10 days postsurgical visit
Placed with needle holder or hemostat

RONGEURS—SIDE-CUTTING

FUNCTION:

To cut and contour bone—removes sharp edges of alveolar crest after extractions for better contour of alveolar ridge; removes exostoses

FEATURES:

Scissor-type handle, cutting edges on side and top of beaks

TRAY SET-UP:

Multiple extractions, alveolectomy/alveoplasty

CLINICAL APPLICATION:

During use, bone will accumulate around cutting edges. Assistant should wipe working ends with 4*4 periodically to remove debris.

BONE FILE

FUNCTION:

To smooth bone for better contour of alveolar ridge, often following use of rongeurs

FEATURES:

Straight or curved working ends
Crosscut or straight cutting ridges
Double ended

TRAY SET-UP:

Multiple extractions and impactions that require bone removal, tori removal, alveoplasty

CLINICAL APPLICATION:

During use, bone will accumulate around cutting edges. Assistant should wipe working ends with 4*4 periodically to remove debris.

TISSUE RETRACTOR—AUSTIN

FUNCTION:

To deflect and retract the periosteum from bone following an incision

FEATURES:

L-shaped with one rounded end and one forked end

Other common designs: Seldin, Senn

TRAY SET-UP:

All surgical procedures

TONGUE AND CHEEK RETRACTOR

FUNCTION:

To hold tongue and cheek away from surgical site

Other common designs: Shuman, Weider

TRAY SET-UP:

All surgical procedures

TISSUE FORCEPS—ALLISON

FUNCTION:

To grasp and stabilize soft tissue flaps during suturing and reconstructive procedures such as gingival grafting

FEATURES:

Hemostat-type handles, serrated tips

TRAY SET-UP:

Any surgical procedure requiring an incision and suturing

EXTRACTION FORCEPS

FUNCTION:

To remove teeth from bony socket

FEATURES:

Straight handle and beaks

Beaks designed to conform to facial and lingual root contour just apical to cervical line

Universal (both beaks same design-fit equally well on facial and lingual) for right and left quadrants

TRAY SET-UP:

Extraction

