In these situations, the implant is allowed to integrate while submerged. The “second stage” is a minor surgical procedure in which the head of the implant is surgically exposed and a temporary healing abutment or temporary restoration is placed to begin to establish the correct emergence profile. Definitive restorative treatment is then initiated after adequate soft-tissue healing.

The recommended technique for this second-stage surgery is an incision around the implant head to surgically remove the soft tissue. Sometimes, a full thickness mucoperiosteal flap is raised to access the head of the implant. The attached gingiva covering and just lingual to the implant head can be mobilized and moved buccally to form an adequate band of attached gingiva around the buccal surface of the implant.

A punch technique has been suggested to leave a smooth even incision around the implant head and bordering the healing abutment. The punch technique is only indicated when there is an adequate amount of attached gingiva over the head of the implant.

If alveolar mucosa covers or is adjacent to the head of the implant, and the punch technique is used, alveolar mucosa will be adjacent to the final restoration. This will result in an inadequate gingival seal adjacent to the restoration, allowing plaque accumulation, inflammation and an unesthetic result.

The punch technique requires that the implant position be accurately located so that no bone is exposed by a punch that is off center.

Sometimes, the implant can be visualized through the soft tissue, but many times locating the exact position of the implant head is difficult. The surgical stent can be an aid in locating the head of the implant also. The mesio-distal position can be determined from periapical radiographs; however, bucco-lingual position is more difficult to determine.

**Fig. 2:** The driver handle (Zimmer Dental).

**Fig. 3:** The driver handle or a similar device is used to apply pressure to the hex driver to force it into the cover screw.
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A technique developed by the author allows accurate locating of the implant head and positioning of the punch, and therefore accurate removal of the overlying soft tissue. The technique is described as Latch-Head Hex Tool Guided Implant Uncovering Using The Punch Technique.

A #12 scalpel is used to locate the hex depression in the center of the cover screw (Fig. 1). A mesio-distal incision approximately 2 mm long is made over the hex depression so the latch-head driver can be inserted into the hex.

The driver handle (Zimmer Dental) (Fig. 2) or a similar device, is used to apply pressure to the hex driver to force it into the cover screw (Fig. 3). The cover screw can be unwound a few turns to blanch the gingiva, allowing the position of the implant head to be better visualized. A slow-speed round bur may be needed if bone is covering some of the cover screw. The desired diameter punch biopsy instrument is selected; they are available in 3.5 mm, 4.0 mm and 5.0 mm diameters (Ace Surgical) (Fig. 4). The latch-head driver is inserted into the cover screw (Fig. 5) and the punch biopsy instrument is inserted over the latch end of the driver (Fig. 6). This guides the punch to accurately incise the attached gingiva, which is directly over the head of the implant (Fig. 7). The hollow cutting end of the punch biopsy instrument may need to be widened inside the plastic handle area with a long thin acrylic bur to allow the latch end of the latch-head driver to not interfere with complete seating of the cutting end over the implant head. With the latch head driver in position, not only is the location of the implant head determined, but also the angle of the implant as it emerges from the edentulous ridge is indicated (Fig. 5).

With this technique, there is accurate location of the implant head and accurate and circular removal of the soft tissue over the implant with no exposed bone (Fig. 8). It is recommended to use the smallest diameter punch allowing the temporary healing abutment to plump out the excess attached gingiva (Fig. 9).
ing abutment to plump out the excess attached gingiva so as to mimic correc-
tive emergence profile and improve esthetics (Fig. 9). This also places some pressure on the attached gin-
giva around the implant to facilitate hemostasis postsurgically. One or two guttation sutures may be used for hemosta-
sis if needed.

This simple technique allows accurate exposure of the implant head with minimal postsurgical bleeding. This technique is indicated in situations where adequate attached gingi-
va is present on the ridge and over the head of the implant. Thus, obtaining the desired result of attached gingiva adjacent to the final restoration allows for an esthetic and functional restora-
tion.

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