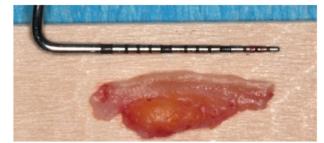


FIGURE 7 Premaxillary palatal wall donor site. 7a Initial incisions. Palatal donor site is selected because this patient has insufficient tuberosity dimensions. Maxillary tuberosity tissue is the preferred graft tissue for mandibular anterior lingual (MAL) gingival recession (GR) because of its optimal density and dimensional stability, and minimally invasive harvest. 7b Suturing after graft harvest



**FIGURE 8** Harvested connective tissue graft with retained keratinized tissue (KT) band. Based on recipient site measurements, harvested graft dimensions are approximately 15 mm  $\times$  5 mm. SCTG is harvested according to Langer and Langer (1985)<sup>5</sup> with the following modifications: Harvest zone: limited to the premaxilla zone. Scalpel blade: oriented perpendicular to the palatal mucosal surface. Horizontal incisions (2): the most coronal incision is positioned approximately 4 mm apical to the free gingival margin of the adjacent teeth. The two parallel incisions are placed 1.75 to 2 mm apart. The distal vertical release incision is limited to only connect the two horizontal incisions. The mesial vertical/oblique incision creates a trap door flap access to facilitate harvesting. The suturing technique includes interlocking continuous and interrupted sutures. The graft is redefined to a 1.5 to 1.75 mm thickness



FIGURE 9 Donor graft suturing to the recipient site. Donor graft is positioned at recipient site with its retained KT band placed coronally and secured with simple interrupted sutures. The tissue is managed gently and with minimal suture tension. The first suture is placed at graft midline. The following sutures are placed alternating right and left side. This facilitates flattening out and stretching of the graft



**FIGURE 10** Recipient site flap suturing over the graft. Tissue is managed very gently and with minimal suture tension. The suture is entered from the external side of flap and  $\ge 3$  to 4 mm apical to incisal edge of flap. The flap is sutured with expanded polytetraflouroethelene (e-PTFE) single interrupted and single tooth sling sutures. e-PTFE is used because compared to PTFE: it stretches (50% air by volume); is less stiff; is more flexible, is more compressible and flattens readily. This decreases risk of suture tear through as the flap naturally retracts slightly during the healing phase. The first suture is placed at graft midline. Continue suturing alternating right and left side. The cut back incision is approximated with interrupted sutures (PGA-PLA fast absorbing). The final position of the flap covers the graft completely and is at the level of the cemento-enamel junction

With the MAL modified CAF approach (mCAF) as described in this paper, we have observed that grafting with CT and its retained KT band (CTGkt) will decrease the risk of the graft being completely buried by the lingual mucosa after healing. This is especially important in the MAL where the native marginal tissue often presents with no KT or KT insufficiency. Although it has been reported<sup>14</sup> that the KE of heterotopically placed SCTG can often undergo degeneration and sloughing during the healing phase, the grafts maintain their structure, which suggests that a genetic predetermination of the specific character of the mucosa exists and depends on stimuli originating in the connective tissue.<sup>15</sup>

However, the exposed CT surface of the SCTG can also be replaced by new epithelium from the borders of the recipient site. If the epithelium from these adjacent borders is nonkeratinized, it increases the probability that