BACKGROUND: Morphologic and dimensional changes of the alveolar ridge occur after tooth extraction. Therefore, it is important to maintain the natural contours of the residual ridge and minimize the resorption of the buccal bone plate, especially in patients with a thin biotype and a high smile line. There is a general consensus that socket preservation techniques are beneficial in minimizing ridge alterations following tooth extraction.

AIM/HYPOTHESIS: To present a 4-year follow-up of an implant rehabilitation of a central incisor after tooth extraction and socket preservation with 'ice-cone technique'.

MATERIALS AND METHODS: 22-year-old female patient went to our clinic presenting tooth #2.1 fracture (Figs.1 and 2) with mobility, pain and indication for extraction. The tooth extraction was flapless, followed by socket preservation with ice-cone technique and the placement of a removable partial denture with no pressure at the site (Figs. 3-12). After 4 months, we placed a platform-switched implant with a morse taper connection (iDCam 4.2x12mm, ID10, France) with a papilla-sparing incision. A surgical guide was used for proper 3D-position of the implant. Contour augmentation was also performed for esthetic reasons (Figs. 15-20).

RESULTS: The postoperative period was uneventful, both for the socket preservation and the implant placement surgery. At the 1, 2, 3 and 4-year recall appointments, periapical radiographs showed peri-implant crestal bone stability. After four years, it is possible to observe stability of the soft tissues with an appropriate balance between pink and white esthetics (Fig. 33).

CONCLUSIONS AND CLINICAL IMPLICATIONS: This conservative approach is well described in the literature, with excellent long-term results in the aesthetic level, contrary to immediate implants that have shown less predictability and greater aesthetic risk mainly due to soft tissue recession. The procedure described was satisfactory on an aesthetic level returning to the patient confidence in her smile.