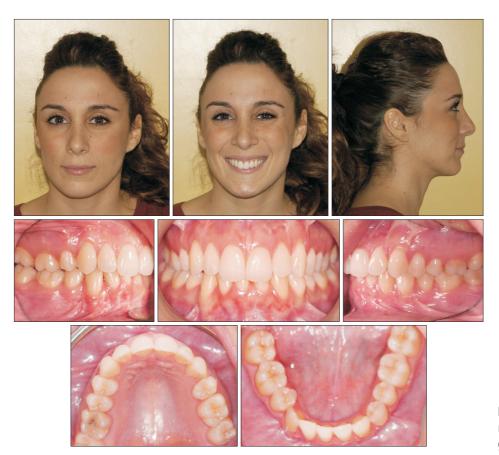## RESULTS

The total treatment duration was 8 months (1 month for the maxillary arch and 8 months for the mandibular arch). At the end of treatment, a bilateral Class 1 molar and Class 1 canine relationship were obtained. The maxillary and mandibular arches were well aligned (Figure 7). The posttreatment lateral cephalometric radiograph and the superimposition of the lateral cephalometric radiographs acquired before and after treatment showed no significant changes (Table 2, Figure 8).

Because of the diligent use of the retainer, at the 2-year retention follow-up visit, the alignment of the maxillary and mandibular teeth was stable (Figure 9).

The posttreatment study models at the end of the orthodontic therapy and at the 2-year follow-up were superimposed using a software (Magics; Materialise, Leuven, Belgium). No relapse was seen with the exception of a minimum deviation (0.15 mm) of the maxillary right central incisor and mandibular right lateral incisor (0.15 mm). Pretreatment gingival recession recordings were unchanged, and no periodontal pocket formation or dentin hypersensitivity was observed. In addition, good preservation of the interdental papillae with no gingival recession was evident. Table 3 shows the mean PPD values and BOP rates in the maxillary and mandibular arches at all time points.

Panoramic radiographs acquired after treatment and at the 2-year retention follow-up showed no

Figure 9. Posttreatment extraoral and intraoral photographs at 24 months.

Table 3. Mean PPD values and BOP rates in the maxillary (Mx) and mandibular (Md) arches

Arch	PPD (mm)				BOP (%)			
	T0	T1	T2	T3	T0	T1	T2	T3
Mx	2.1	2.0	1.8	1.6	19.7	18.2	16.6	16.6
Md	1.7	1.7	1.6	1.6	24.2	20.0	18.3	16.6

PPD, probing pocket depth; BOP, bleeding on probing; T0, before oral surgery; T1, at 4 months; T2, at the end of treatment; T3, and at 2-year retention follow-up.