CLAIMS

1. A device for treating a soft palate in a patient to treat sleep apnea, snoring or both, the device comprising:

a handle;

a shaft forming a longitudinal axis and having a distal end with an angled neck;

an elongate treatment element attached to the angled neck of the shaft such that the treatment element is angled relative to the longitudinal axis of the shaft, the treatment element comprising:

a treatment surface; and

multiple pairs of bipolar radiofrequency electrodes arrayed along the treatment surface in two parallel rows, wherein the bipolar radiofrequency electrodes are moveable along the treatment surface; and

a thermocouple on the treatment surface between the two parallel rows of bipolar radiofrequency electrodes for measuring a temperature of soft palate tissue being treated;

an energy delivery cable attached to one end of the handle, opposite the shaft; and

a radiofrequency energy source and controller for attaching to the handle via the energy delivery cable.

2. A device as in claim 1, wherein each of the bipolar radiofrequency electrodes is shaped as a triangle protruding from the treatment surface.

3. A device as in claim 1, wherein the treatment surface has a convex shape for creating a concave deformity in the soft palate.

4. A device as in claim 1, further comprising multiple shafts and multiple treatment elements, wherein each of the treatment elements is located on a different one of the multiple shafts.