PURPOSE: This study evaluated the long-term (5-year) durability of radiofrequency energy delivery for fecal incontinence.

METHODS: This was an extension of the follow-up from our original prospective study in which patients who suffered from fecal incontinence were treated with the SECCA system for radiofrequency energy delivery to the anal canal muscle. The Cleveland Clinic Florida Fecal Incontinence Scale (0-20), fecal incontinence-related quality of life score, and Medical Outcomes Study Short-Form 36 were administered to five years. Differences between baseline and follow-up were analyzed by using paired t-test. RESULTS: A total of 19 patients were treated and followed for five years, including 18 females (aged 57.1 (range, 44-77) years). The mean duration for fecal incontinence was 7.1 (range, 1-21) years. At five-year follow-up, the mean fecal incontinence score had improved from 14.37 to 8.26 (P<0.00025) with 16 patients (84.2 percent) demonstrating >50 percent improvement. All fecal incontinence-related quality of life scores improved, including lifestyle (2.43 to 3.15; P<0.00075), coping (1.73 to 2.6; P<0.00083), depression (2.24 to 3.15; P<0.0002), and embarrassment (1.56 to 2.51; P<0.0003). The social function component of the Short-Form 36 improved from 38.3 to 60 (P<0.05). There was a trend toward improvement in the mental component summary of the Short-Form 36 from 38.1 to 48.14. There were no long-term complications.

CONCLUSIONS: Significant and sustained improvements in fecal incontinence symptoms and quality of life are seen at five years after treatment with the SECCA system. This treatment should be considered for patients suffering from fecal incontinence not amenable to surgery and who have failed conservative management.

Radiofrequency energy delivery, using the Secca device, into the anal canal muscle is a new modality that, in this study has safely provided five-year improvement in Wexner, FIQL scores and patient quality of life on an outpatient basis. Although not all patients improve, the majority can expect significant clinical response with minimal risk. Furthermore, there are no "bridges burned" by providing the Secca early in the treatment spectrum for patients suffering from fecal incontinence.