toothpaste. The 24-week trial was completed by 273 patients, with 137 in the test group and 136 in the control group.

RESULTS

Air Blast Sensitivity Testing

Air blast sensitivity evaluation yielded a mean Schiff score of 2.54 in the test group and 2.51 in the control group at baseline. The difference was not statistically different. After the single prophylaxis paste application, the mean Schiff scores were 1.94 for the test group and 2.29 in the control group, both significant reductions from baseline. The difference between the 2 groups was statistically significant. After 4 weeks, the Schiff score was 2.01 in the test group, which was reduced but did not reach statistical significance. The Schiff score continued to drop until 24 weeks, when it was 1.40 in the test group, which was a significant reduction from the baseline score. The reduction in Schiff score was 23.6% from baseline to prophylaxis application and 44.9% from baseline to 24 weeks.

The Schiff scores in the control group were significantly reduced between baseline and 4, 8, and 24 weeks, with a value at 24 weeks of 1.69. There was an 8.8% reduction from baseline to prophylaxis application and a 32.7% reduction from baseline to 24 weeks.

The difference between the Schiff scores of the 2 groups after 4, 8, and 24 weeks was statistically significant. The test group had a more significant result.

Tactile Sensitivity Testing

At baseline the test group had a mean VAS of 27.96, whereas the control group had a mean VAS of 25.96. The difference was not statistically significant.

At the prophylaxis paste application, the test group VAS was 17.69 and the control group VAS was 19.59. Both were a significant reduction from the baseline values. A statistically significant difference of 9.7% was shown.

After 4 and 8 weeks, the VAS values for the test group did not differ significantly from those at prophylaxis paste application. After 24 weeks, VAS value fell to 11.89, which was a statistically significant reduction from the time when the prophylaxis paste was applied and from the values after 4 and 8 weeks. The reduction was 36.7% between baseline and paste application and 57.5% from baseline to 24 weeks.

In the control group, no significant reduction in VAS occurred between paste application and 4 or 8 weeks. After 24 weeks, the VAS was significantly reduced compared to paste application values. The VAS scores of the test and control groups did not differ significantly from each other at any point.

DISCUSSION

DH pain was significantly reduced after the 8% arginine prophylaxis products were used for 24 weeks compared to the relief obtained in the control group.

Clinical Significance

Clinicians can offer evidence-based proof that 8% arginine products will provide the relief from DH pain that their patients need. The effects were both immediate and long-lasting. Additional clinical studies should be done that include a larger sample size, a positive control, and the use of either the paste or the toothpaste alone to confirm the results of this study.

Hirsiger C, Schmidlin PR, Michaelis M, et al: Efficacy of 8% arginine on dentin hypersensitivity: A multicenter clinical trial in 273 patients over 24 weeks. *J Dent* 83:1-6, 2019

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EATING DISORDERS

Anorexia nervosa and bulimia nervosa

BACKGROUND

Eating disorders (EDs) are serious conditions related to persistent behaviors having to do with eating. These behaviors have a negative effect on the social, mental, and physical health of the affected person. The primary EDs are anorexia nervosa (AN) and bulimia nervosa (BN). AN involves the restriction of energy intake, which produces significantly lower body weight; intense fear of gaining weight or becoming fat; and an extreme effect on the individual's self-image produced by a preoccupation

with body shape and weight. BN characteristics include recurrent binge eating episodes with a perceived lack of control over eating; inappropriate compensatory behavior, such as vomiting, overexercising, and purging to prevent weight gain; and a self-image skewed by an unhealthy focus on body shape and weight. Although ED can affect both genders at any age, it's most common in adolescents and young women. Strong evidence suggests that persons who have ED exhibit poorer overall health than persons without ED. In addition, a high risk for dental caries and erosive tooth wear is commonly found in ED patients. A case-control study was undertaken to assess the dental and periodontal health in patients with AN or BN compared to a control group.

METHODS

Seventy women with ED (36 with AN and 34 with BN) and age-matched controls participated. The ED group was in a public vhospital psychiatry and addiction unit. All subjects underwent a full-mouth examination and oral hygiene behavior assessment.

RESULTS

ED patients demonstrated a higher frequency of dental attendance and tooth brushing than controls. However, the decayed-missing-filled tooth (DMFT) scores indicated that ED patients were more susceptible to dental caries than controls. In addition, periodontal evaluation showed the mean percentage of sites with dental plaque ad bleeding on probing was greater for the ED participants than the controls. ED patients had more than 2% of the sites evaluated evidencing gingival recession of 3 mm or more. None of the controls had any gingival recession exceeding 2 mm. ED patients also had a significantly higher percentage of sites with clinical attachment level (CAL) of 3 mm or more than controls did. However, the frequency of probing depth (PD) of 4 mm or greater was less for ED patients than for control subjects.

Patients with AN brushed their teeth more frequently than patients with BN, and both brushed more frequently than controls. The prevalence and severity of erosive tooth wear showed significant differences between those with AN and those with BN. The Basic Erosive Wear Examination (BEWE) was 3 or greater for 76.5% of the BN patients but just 41.7% of the AN patients. The worst plaque control was noted in the AN group, whose plaque index was nearly 80%, compared to about 60% in the BN group ad 50% in controls. AN patients had higher values for mean percentage of sites with bleeding on probing than BN patients or controls. Plaque index and gingival index in BN were the same as for controls. AN patients had significantly more sites with a CAL of 3 mm or greater than BN patients.

DISCUSSION

ED patients differ based on the specific disorder they have. Because both AN and BN patients have oral health problems, treatment is needed, but it's wise to provide approaches tailored to the individual's specific problem.

Clinical Significance

Both AN and BN patients have a higher risk for poor oral health parameters. ED affects not just the dental structures but also the periodontium. Poor periodontal health and risk for further deterioration affects especially AN patients. Because gingivitis and gingival recession generally progress silently, AN patients may be less aware of the oral impact of their ED than BN patients might be. AN types should be supervised to ensure their tooth brushing behaviors are controlled appropriately. Preventive efforts dentists can employ are to educate young girls and women about the dangers associated with EDs and to evaluate the possibility of ED being present if a young woman exhibits gingival recession or erosive tooth wear.

Pallier A, Karimova A, Boillot A, et al: Dental and periodontal health in adults with eating disorders: A case-control study. *J Dent* 84:55-59, 2019

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