Rapid maxillary expansion effects on nocturnal enuresis in children: a follow-up study.

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OBJECTIVE: To assess the effects of 10-14 days of rapid maxillary expansion (RME) on nocturnal enuresis (NE) in children who have long-standing resistance to medical therapy and to evaluate the long-term success rate after 10 years. MATERIALS AND METHODS: Twenty-three children with NE, aged 6-15 years old (mean age = 10), who wet their bed almost every night and had never been dry were referred from pediatric specialists. Mean RME was 6.5 mm (range = 5-8), but only 7 of the 23 patients had lateral crossbites. Rhinomanometric measurements were taken before and after RME, and patients were interviewed 10 years after treatment. RESULTS: Positive effects of RME were observed in nearly 50% of the patients within 1 month of treatment: six were completely dry and five had notable improvements. Relapse in the overexpanded arches to a normal transversal occlusion was noted within 1 year. No correlation was found between success and improved airways, familial heritage, school performance, or other social factors. Younger children responded better to the treatment. Results were stable at the 10-year follow-up, and no adverse reactions were reported. CONCLUSION: Orthodontic RME is a new option for treating children with NE who are resistant to medical therapy; the treatment has no adverse side effects.