

Universidad de Granada

## Effective tooth brushing can help men avoid erectile dysfunction, study finds

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Research news

Men who suffer from periodontitis, a disease characterised by inflammation of the gums and damage to the structures that surround and support the teeth, are at greater risk of experiencing erectile dysfunction. Effective tooth brushing, coupled with good oral hygiene, can help prevent this type of male sexual impotence.

That's the message of a study conducted by researchers from the Department of Surgery and Surgical Specialties (Urology) and the Department of Stomatology at the University of Granada (UGR), Spain.



Erectile dysfunction (ED) is defined as the inability of a man to achieve an erection, due to physical or psychological factors or a combination of the two. Periodontitis is a chronic inflammation of the gums, which progressively destroys the alveolar bone and the connective tissues that anchor the teeth in place. If left untreated, it can ultimately lead to tooth loss. The periodontal bacteria or inflammatory cytokines that originate in the infected gums harm the vascular endothelial cells. When this endothelial dysfunction occurs in the blood vessels of the penis, blood-flow is adversely affected, leading to impotence.

The UGR study was performed on a sample of 80 men, using 78 controls, among patients receiving treatment at the Urology Service of the San Cecilio University Hospital at Granada's Health Sciences Technology Park (PTS). The participants provided their sociodemographic data, underwent a periodontal examination, and were tested for testosterone levels, lipid profile, C-reactive protein, blood glucose levels, and glycated haemoglobin.

The researchers found that 74% of patients with ED showed signs of periodontitis. Those with the most severe ED presented the worst periodontal damage, while sufferers of periodontitis were 2.28 times more likely to present ED than patients with healthy gums. The biochemical variables associated with ED were triglycerides, C-reactive protein, and glycated haemoglobin.

The study—the first of its kind to be conducted on a European population—was part of a doctoral thesis project authored by dentist **Amada Martín Amat** and her thesis supervisors **Francisco Mesa** (Stomatology) and **Miguel Arrabal** (Urology).

The results have been published in the Journal of Clinical Periodontology, the leading international scientific journal in periodontal research.

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