

◀ that all retainers are still completely bonded to tooth, and to re-attend if they sense any increased movement of the bridge that might denote a partial debond. Should this occur, the pragmatic approach is usually to remove the debonded wing to convert the bridge to a cantilever. Should the bond fail on a cantilever RRB, it will be all too evident to the patient! Thankfully, resolving this is often very straightforward, simply requiring sandblasting of the tooth and retainer, and then rebonding. However, if the cause of the debond is diagnosed to be a flexible retainer wing or connector, remaking the bridge after addressing the design faults is advisable.

**Conclusions**

RRBs are the ultimate in minimally invasive dentistry, where an entire tooth can be replaced with no removal of tooth tissue or the need to resort to surgery, as is the case for dental implants. They are less expensive, less biologically invasive and less time consuming than either conventional bridges or dental implants. They are more resistant to caries than conventional bridges, and less problematic than implants in periodontally susceptible patients, or those at risk of osteonecrosis. However, even though there are many reasons to recommend RRBs, they are the epitome of a technique-sensitive treatment. Designed and fitted poorly, they are a source of huge frustration for the dentist and patient alike. Executed correctly however, RRBs provide an excellent solution to tooth loss from all causes, have predictable clinical survival, and perhaps most importantly, have few negative effects should they fail. ■

CLINICAL PUZZLE

Painful red gums



A 61-year-old otherwise well male patient presented with painful, red, increasingly swollen gingivae and occasional gingival bleeding with tooth cleaning that has been worsening over the past 6–7 months. There has been some superficial ulceration of the lower left gingivae. There is no identifiable initiating factor. The clinical symptoms and signs have persisted despite assessment by a specialist in periodontology, debridement of calculus and the patient maintaining a fair level of oral hygiene. A recent full blood cell count undertaken by his general medical practitioner revealed no abnormalities. The patient is single, employed as a concierge, does not smoke tobacco or other preparations, rarely drinks alcohol, and has a history of contact dermatitis for which he occasionally takes fexofenadine.

Can you identify or diagnose what is shown in the image? Send your answers to [k.quinlan@nature.com](mailto:k.quinlan@nature.com) by 9 February 2023. The answer will be revealed in an upcoming issue.

If you would like to send a clinical puzzle, view the details here: <https://www.nature.com/articles/s41415-022-5392-2>.

First dentist to give the Calman Lecture



Professor Barry F. A. Quinn of the University of Liverpool, School of Dentistry delivered the Calman Lecture on 14 December 2022 at the Academy of Medical Educators (AoME).

The prestigious annual Calman Lecture is given in honour of Sir Kenneth Calman HonFACadMed, one of the founders of AoME.

As a tribute to Sir Ken's own enormous involvement, leadership and contribution to teaching, learning and the organisation of medical training, the general theme for the Calman Lectures is reflections on the education of doctors. Professor Quinn is the first dentist to be given the honour to present the Calman Lecture; past recipients have included Sir Peter Rubin, Past Chair of the General Medical Council and Professor Cees van der Vleuten, a Professor of Education in The Netherlands.

The title of Professor Quinn's lecture was 'Haptically enabled virtual reality simulation: is this the future for surgical skills training?'

<https://www.medicaleducators.org/Calman-Lecture-Presidents-Evening>

Advertisement placeholder

Hier steht eine Anzeige.

Hier staat een advertentie.

Advertisement placeholder

Hier steht eine Anzeige.

Hier staat een advertentie.

Advertisement placeholder

Hier steht eine Anzeige.

Hier staat een advertentie.

Advertisement placeholder

Hier steht eine Anzeige.

Hier staat een advertentie.