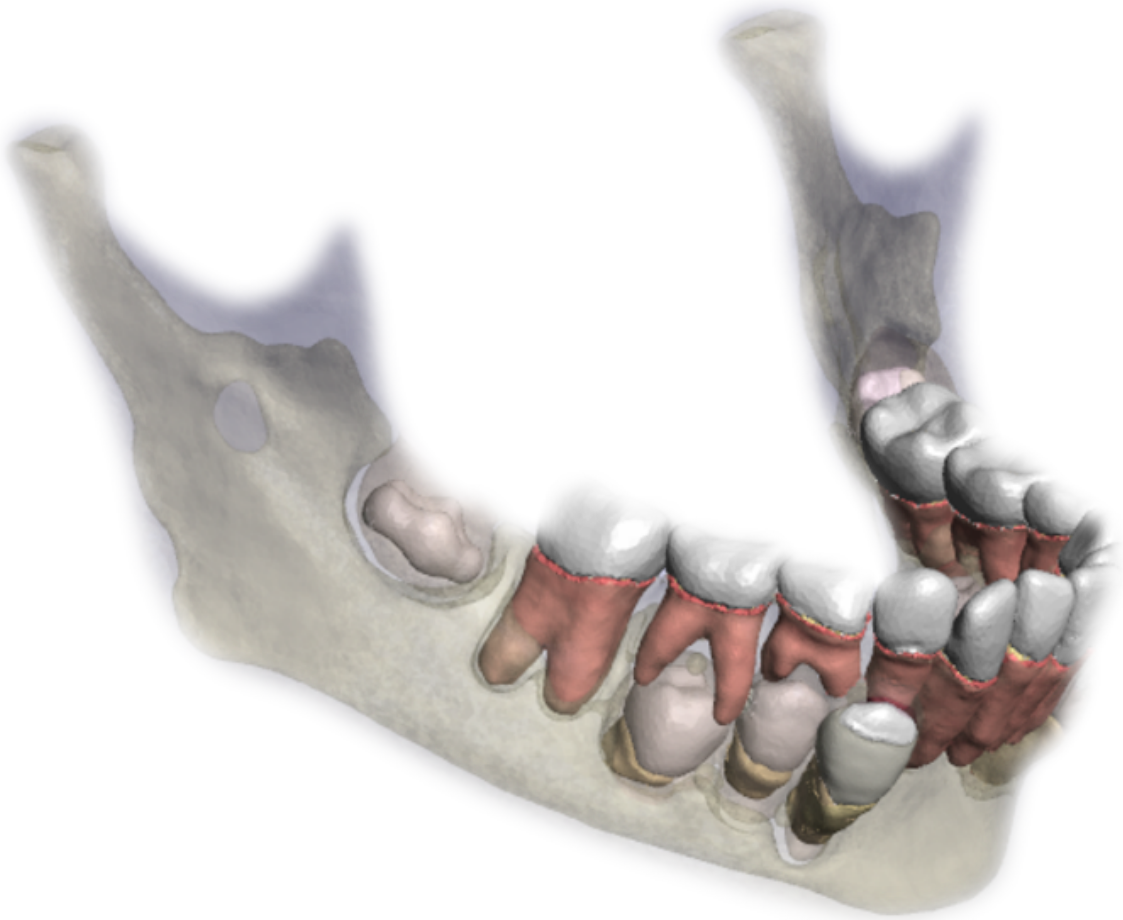


Biting and chewing gets you teeth

June 29 2017



Biting and chewing force our buried teeth to emerge, not an innate

'eruptive' force from within the bone of the jaw as previously thought, according to biomechanical modelling done by Babak Sarrafpour and an interdisciplinary team working at the University of Sydney.

Around the age of six months, our first set of [teeth](#) emerge from our [jaws](#). Then around eight years of age, our second set of teeth emerges.

But there has been little clinical evidence of why our teeth emerge from our jaws.

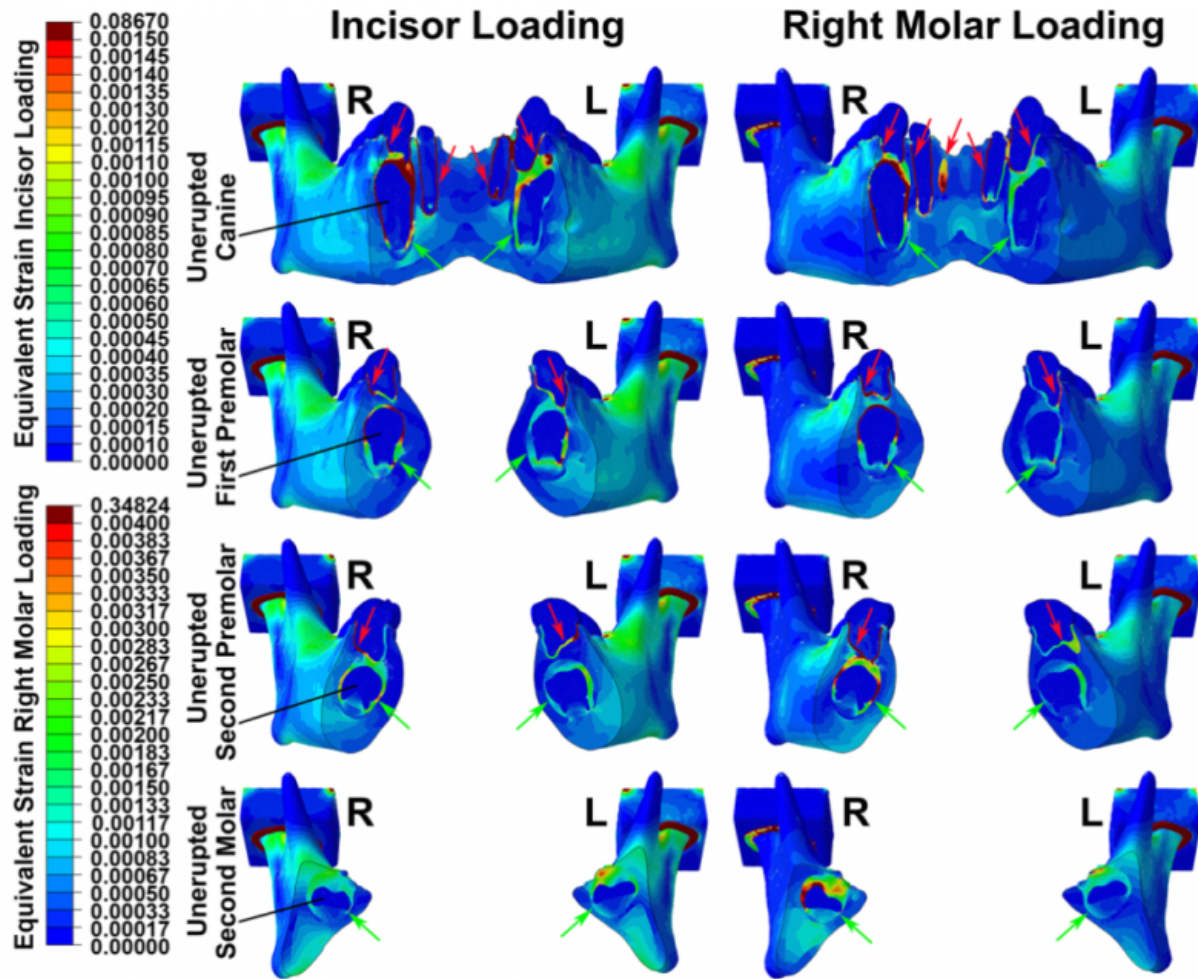
Babak created a 3-D computer model of an eight-year old's jaw showing the strains and forces within the bone of the human jaw as it bites and chews.

The modelling showed that forces created within the jaw cause deformation of the thin layer of soft tissue that surrounds teeth that are still buried inside the jaw, and it is this tissue deformation that forces the teeth outwards.

The new biomechanical theory is more consistent with clinical and experimental observations than earlier theories.

The results of this study have been published in the prestigious multidisciplinary journal *PLoS One*.

Further work aims towards novel computer-aided therapies and improved orthodontic outcomes.



Computer modelling of an eight-year old's jaw shows biting and chewing drive our teeth to emerge.

Provided by Freshscience

Citation: Biting and chewing gets you teeth (2017, June 29) retrieved 9 April 2024 from <https://medicalxpress.com/news/2017-06-teeth.html>

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