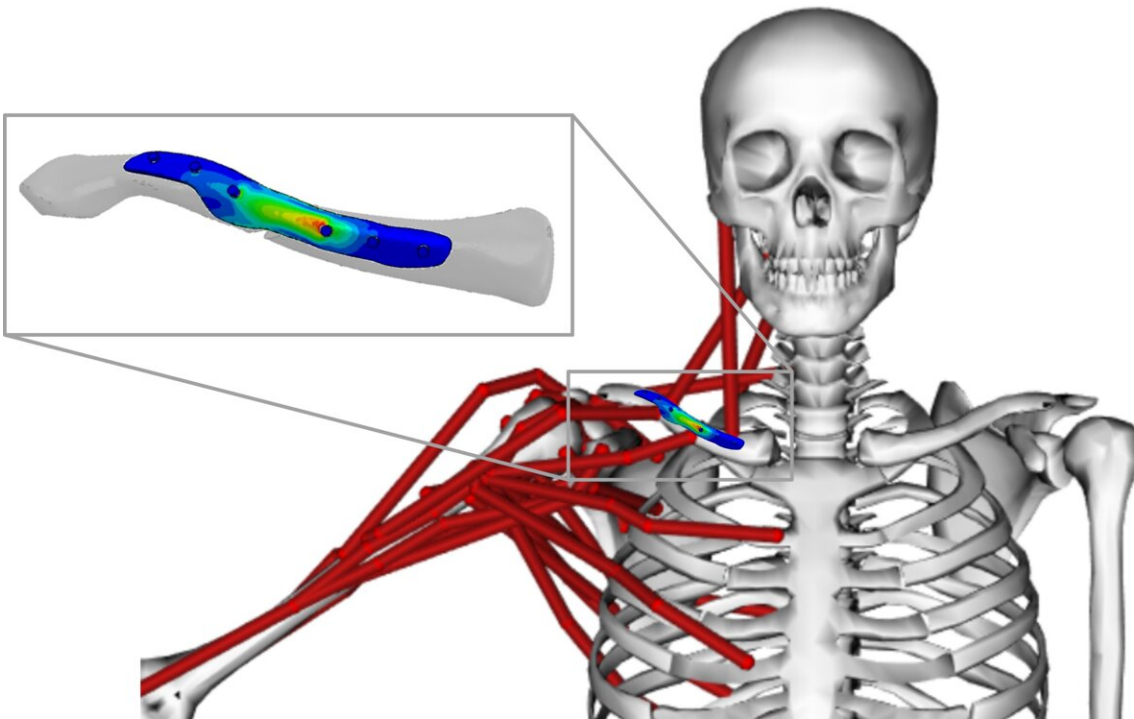


# Patient-specific plates may help heal collarbone fractures

October 20 2021

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A new study published in the Journal of Orthopaedic Research indicates that custom plates developed through computer modeling may help heal collarbone fractures. Credit: Sanne Vancleef

Fractures of the clavicle, or collarbone, are common. Unfortunately, current fixation plates that are used to surgically stabilize these fractures are suboptimal, leading to reoperation rates of up to 53%. A new study

published in the *Journal of Orthopaedic Research* indicates that custom plates developed through computer modeling may be a better option.

In the [study](#), the plates, which were designed for the individual patient, showed superior performance in terms of anatomical fit, strength, fracture stability, and fatigue, despite their reduced thickness.

"This study highlights the unique potential of computer modeling–based approaches in the [design process](#) of personalized medical implants," said lead author Sanne Vancleef, of KU Leuven, in Belgium.

**More information:** *Journal of Orthopaedic Research*, [DOI: 10.1002/jor.25178](#)

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